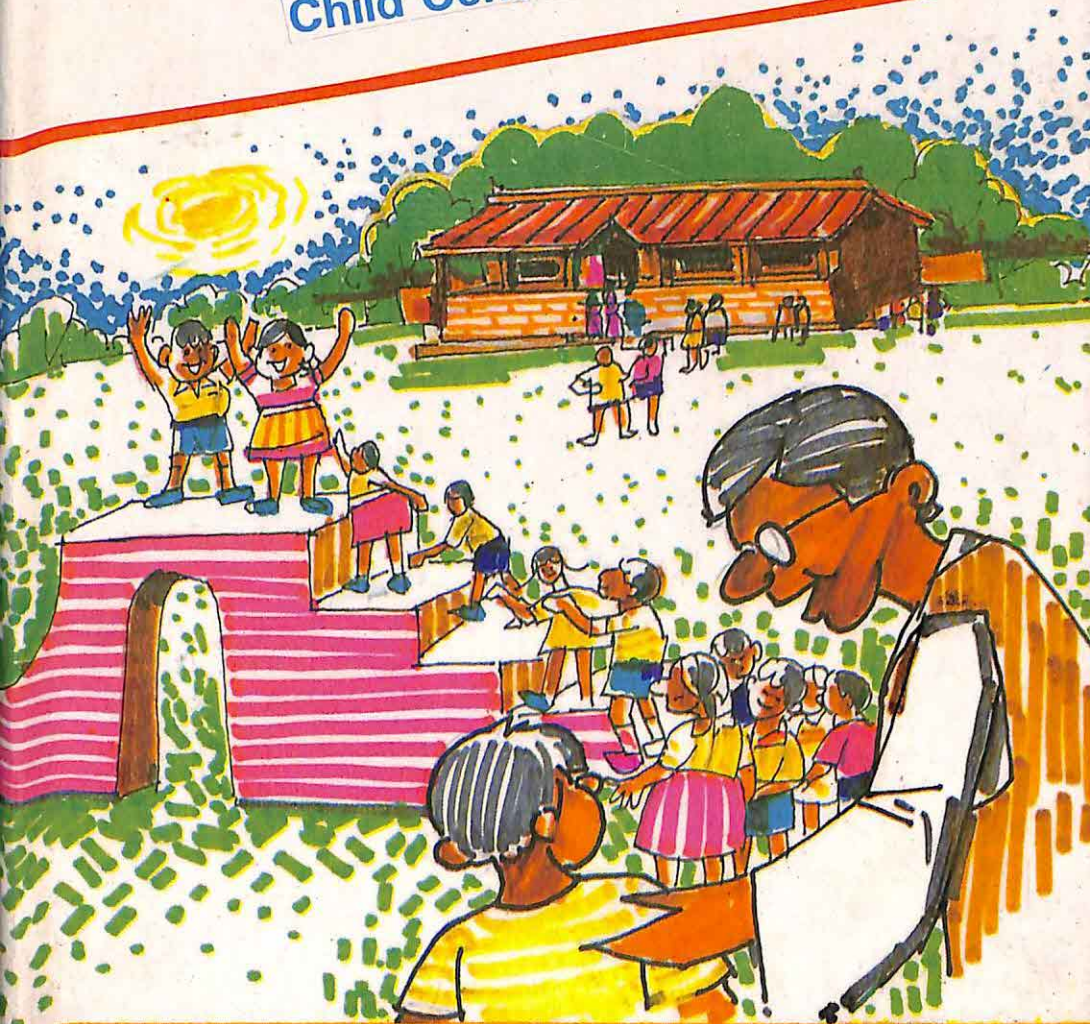


EFFECTIVE TEACHING

Child Centred Approach



N. K. JANGIRA
PINKI JANGIRA

EFFECTIVE TEACHING

Child Centred Approach

By the same author

- Effective Teacher Training
- Responsive Teaching : Innovative Experiments
- Technology of Classroom Questioning

EFFECTIVE TEACHING

CHILD CENTRED APPROACH

**N. K. JANGIRA
PINKI JANGIRA**



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Foreward

The challenge in education today is to improve the quality of teaching. Quality of teaching implies learning by all pupils in the classroom, including those with special needs arising from the interactive effects of several factors. The seriousness of the challenge increases further due to the class size, multigrade teaching and heterogeneity in the classroom. The teachers are to provide quality teaching to all children within these constraining factors coupled with the limited physical facilities. The scene is marked by despondency in the whole sector of education and the community. Doubts are expressed about teacher's capabilities to provide effective teaching.

The author seems to be optimistic about improving the quality of teaching. He feels that the quality of teaching can be ensured within the existing constraints. The emphasis is on visualising teaching from the point of view of learning. Teaching is to be learning and learner-oriented. The learner is to be actively involved in the learning process through a variety of activities. Effective teaching, according to the author, depends upon providing conducive learning environment, learning material, learning activities and continuous monitoring and management of learning. It is different from the conventional concept of teaching. It is to be responsive to emerging needs of pupils. Individual needs are in focus in this new concept of learning and teaching.

The arrangement of the material in the alphabetical order A to Z makes it easy for the teacher to remember and refer back. The interactive style stimulates the teacher to reflect, adapt and adopt the practices indicated. Every reader is tempted to try and have a go.

The optimism of the author is based on the premise that teachers can be educated and trained to provide effective teaching in the classroom. If properly trained they will definitely succeed in increasing the learning and achievement of pupils despite constraints. The book, therefore, is useful not only for teachers, but also for teacher educators who are involved in preservice and inservice training of teachers. Educational administrators can use it to provide guidance to teachers and evaluate teaching.

The author deserves to be complimented for preparing this down to the earth practical book on effective teaching using child-centred approach. It is a timely effort in the context of the futuristic thrust to provide access to basic education to all. This is indeed a significant contribution to professional literature on teaching.

A.K. SHARMA
Director
National Council of Educational
Research and Training
New Delhi

Preface

Passion for teaching keeps us on prowl amidst literature on teaching and learning. We keep a track of research and innovations in teaching. We also experiment and try out innovatory teaching and learning practices with children in schools and professionals in preservice and inservice training programmes. This book is the outcome of interaction between the state of the art research and studies on teaching and actual teaching experience. The principles and practice of effective teaching using learner centred approach have evolved out of this interaction.

The optimism and faith in learning and practising capabilities of teachers have prompted me to put the knowledge and experience together. The principle or practice has been explained and backed up by specific guidelines to put it into practice. The illustrations are stimulating and penetrating. Each presentation is concluded with a set of questions guiding the readers to reflect and place a particular principle or practice in the context of their own teaching and evolve action points to incorporate it in their teaching style. The presentation style is highly interactive, always inducing the reader to think and reflect in different ways, sometimes challenging, sometimes evaluating and accepting.

The language is simple to understand. Alphabetic organisation facilitates recall and review of the principle or practice. Once read and reflected these remain at

finger tips for practice. Comprehensiveness of coverage has resulted in overlap which is inevitable in a complex human activity like teaching. Cross referencing facilitates and reinforces interlinking. The readers concerned with the practice of teaching will appreciate and enjoy the innovative style of presentation.

The book does not present ready made recipes for effective teaching. It provides frame of reference in the *Prologue*, followed by a principle or practice represented by each alphabet. The presentation leaves scope for adaptation to individual teaching style supported by the state of the art research and development in this area. For fluency of reading and reflection the sources have not been documented in the text. It has drawn on several rich professional sources. If the readers reflect, review, share and evolve classroom learning and teaching strategies, the purpose of writing this book will be realised. The *epilogue* indicates guidelines for implementation. The emphasis should be on intelligent use of these principles and practices in teaching.

We owe teachers and pupils who enthused me to put my ideas and experiences in this book. Their demand always put up a challenge to find time from field activities to share experiences. Their patience and continuous faith in me is responsible for this contribution. The encouraging response of professionals during interactions made the urge to complete this venture stronger. Mel Ainscow and my daughter Pinki Jangira who shared ideas and materials liberally deserves a special mention. Without the secretarial contribution of Anil Bahl, the book would not have achieved the quality it has. Besides acknowledging the immense contribution of all these persons, I owe everyone a deep sense of gratitude. In anticipation, I express my gratitude to the readers who would spare time to share their experience with the book with me personally.

Contents

<i>Forward</i>	(v)
<i>Preface</i>	(viii)
Prologue	1
A Active Involvements	9
B Busy Classroom	13
C Cooperative Learning	17
D Demonstration	21
E Expectations	25
F Feedback	28
G Goal Setting	32
H Humour	36
I Individual Needs	39
J Journal of Learning	43
K Knowing the Learner	47
L Linking Learning	51
M Management of Resources	54
N Negotiation	58
O Out of Classroom Learning	62
P Praising and Encouraging	66
Q Quiz	69
R Responsibility for Own Learning	71

S	Success Experience	74
T	Team Teaching and Collaborative Effort	77
U	Unexpected Encounters	80
V	Variety	83
W	Working Atmosphere	86
X	X-Raying for Evaluation	89
Y	Your	93
Z	Zeal	95
	Epilogue	98

Prologue

Streams of Inquiry

The search for effective teaching is as old as teaching itself. Even in oral tradition, effective ways of learning and memorisation were searched. Systematic search for effective teaching based on empirical research, however, is about a century old. There had been a reflective phase in between. Three streams of inquiry have contributed to this search.

The first stream carried reflections of the master teachers who derived effective teaching principles and methodologies from philosophic tradition, their close observation and practice. Socratic method, project method, Dalton plan, life centric method of Gandhiji's basic education, and creative learning experience based method of Rabindra Nath Tagore at Shantiniketan are some examples of this stream. This tradition yielded a number of teaching methods which were perceived as effective teaching exemplars according to the objectives which the philosophers or master teachers intended to achieve. In fact, the originators of these methods were perceived as the embodiment of effective teaching.

The second stream started with the psychology of learning. The inquiry into the learning process initially concentrated on animal learning in laboratory situations. The learning principles were applied to human learning in general and, in teaching situations in particular. The limitations of such an application to educational context

led to direct inquiry into the process of learning in the classroom and application of the psychology of learning to curriculum design and instruction. The search for effective teaching owes a lot to inquiry into the process of learning in a variety of contexts.

Research on teacher effectiveness represents the third stream of inquiry contributing to effective teaching. It started with an inquiry into the relationship between teacher characteristics and pupil outcomes. Half a century of research expending huge resources yielded little of consequence to the practice of teaching. It was considered that teacher characteristics and pupil outcomes were far removed in teaching space. Pupil outcomes must be closely related to what goes on in the classroom rather than teacher characteristics. The processes in classroom came into focus of this stream of inquiry in mid fifties with the advent of powerful techniques of studying classroom interaction. It was a major break through in the search for effective teaching, but not enough for the complex and fluid teaching phenomenon. The seventies and eighties enlarged the compass of this stream of inquiry by inducting internal and external contexts of teaching. The internal context covers classroom learning environment including classroom climate and external context refers to school policies and organisational climate. Simultaneously, predominance of teacher behaviour in initial stages of this line of research was also balanced by increased attention to pupil learning behaviour.

What is effective teaching?

Brief description of the contributory streams of inquiry into effective teaching was essential to conceptualise and define effective teaching. Effectiveness of teaching will have to be defined in terms of the amount of progress a pupil makes towards the achievement of defined objectives. Needless to say, the process through which progress is achieved to attain teaching objective is interactive. It is through the interactive effects of objectives, learning environment; and significant persons,

like teacher, peers and; above all, the self, that progress in the learning task is achieved. It differs from teacher effectiveness inquiry which is wider in scope. Teacher effectiveness also covers teacher characteristics and teacher training which fall in the area of selection and teacher education. Effective teaching, however, is more concerned with teacher performance in the learning environment. The emphasis of the psychology of learning is on the process and conditions of learning. Effective teaching obviously is an interactive and integrative concept. The integrative nature of teaching is conceptualised in this section.

Effective teaching has been visualised in Figure 1.1. Middle row cells indicate learning-teaching progression and the first and third row cells represent contexts which influence components in the middle row. As a first step, the components are briefly described. It will be followed by description of interrelationships and interactions.

Defining the learning task: It involves selection and definition of the learning task appropriate to learners and the context for which learning is being planned. For the learners it will result in learning objectives and for teachers instructional objectives. The difference is in perception and the perceiver. Both have to be in terms of pupil behaviour.

Planning learning experiences: To achieve the objectives, learning experiences are planned. Traditionally, it has been the task of the teacher, but current practice is to involve all parties relevant to learning. Obviously, variety of learning experiences are needed to meet different learning objectives and needs of a variety of pupils.

Pupil learning interaction: The learning experiences are provided to pupils. They interact with learning materials both, print and non print. The pupils also interact with peers and the teacher. The interactions can be bilateral, in small groups, and in large groups. These interactions can be formal as well as informal. Similarly, interactions with environment can be

unstructured, semi structured and structured. The type depends on the purpose and the stage of learning process at which these are required.

Pupil outcomes: Pupil outcomes represent actual learning that has been effected through learning interactions. These are measured in terms of the objectives set in defining learning. These constitute indicators of effective teaching. The discrepancy between anticipated learning outcome and actual learning outcome is the index of teaching effectiveness. The lower the discrepancy the higher is the teaching effectiveness.

Pupil characteristics: The context covers school and class characteristics, The policy regarding curriculum and evaluation, human relations, physical support facilities, availability of media and material to the teacher, the relationship between the school and community are some of the components of the school context. The group characteristics of class, class size, average ability, heterogeneity and sociometric character form the class context. The school climate and classroom climate also constitute the context components of teaching.

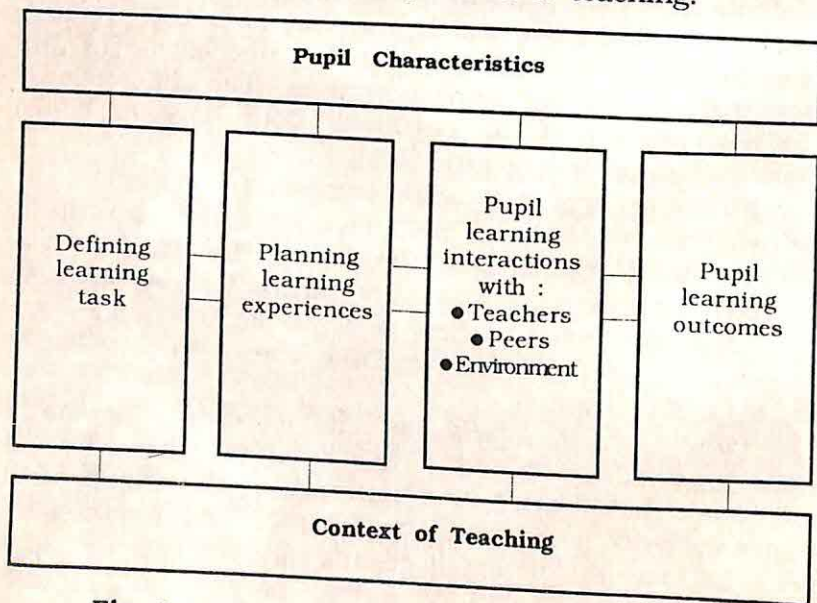


Fig. 1.1 : Conceptual frame of effective teaching

The four cells in the middle row represent progression of activities and the outcomes comprising effective teaching. The cells in upper and lower rows influence the progression. The learning task definition is influenced by both, the pupil characteristics and the context. The existing level of relevant learning and curriculum policy and practice in the school are considered in defining the learning task. It is followed by planning of the learning task which is again influenced by pupil characteristics and the school and class contexts. For example, the learning styles of children and their individual needs determine the type of learning experiences besides the nature of the learning task. The school curriculum practice and availability of learning and teaching resources can have both facilitating as well as constraining influence. Imaginative teachers concentrate on facilitating features of the context and try to overcome the limiting influence of constraints, at least on minimising their influence. The provision of learning experiences is the actual learning and teaching process which are mostly interactive. The interactions are influenced by interactive abilities of pupils and the school and class contexts. In the classroom these generate the learning climate. The process results in learning outcomes which are measured in accordance with the school evaluation policy. These outcomes change pupil characteristics on the one hand and, provide feedback to the preceding three components for subsequent learning tasks as shown by two arrows in the reverse direction, on the other. The whole process is dynamic.

The concept of effective teaching described here is different in several ways. It represents qualitative shift from teaching to learning. That is why learning is more in focus. The traditional belief is that pupils learn school curriculum only when teacher teaches. Other resources of learning are always held in backstage. The shift in focus from teaching to learning assumes that pupils learn in many ways and from a variety of learning resources. The individual needs are met alongwith group needs. The pupil is a learning resource in its own right.



The peer interaction and use of peers as learning resource are also highlighted in the emerging concept of effective teaching. These interactions take a variety of forms. The dynamics of learning involves learning environment created by school and classroom climates. The learning process is a multidimensional act and so is teaching. In fact each component in the framework of effective teaching has dynamic process of its own. This process is not being spelt out here. It has been left to the readers to discover as they excurse through the book in subsequent chapters. You will discover child focused teaching approach.

Organisational Approach

The organisational approach for the presentation of operational components of effective teaching followed in this book is unique. Usually the material is organised into details of each component. Here the principles and practice of effective teaching emerging from research on teaching and the psychology of learning have been culled

out. For each of the alphabets a principle or practice has been discovered. The principles have been stated and explained. The description is followed by points for putting it into practice. Each principle has also been visualised by an artist. All the three together make the principles and practice of teaching quite clear. Because of association of each principle with an alphabet, these will always be on the tips of practitioners.

Teaching, like other social sciences, is a complex activity. It involves organised series of acts to achieve a defined objective. Logically, a sequence in these acts is a must. But the consequences of the act and the act to follow are determined by pupil response to the preceding act. The sequence of acts, despite precise planning, is to be adapted to the new demands of pupil response. Alphabetic presentation of principles of teaching follow the sequence of alphabets rather than the established sequence of teaching acts. The change in sequence, therefore, is not due to pupil response but due to the selected presentation mode.

The principles of effective teaching presented here are not mutually exclusive. There is an overlap. The overlap is also due to the nature of teaching. Being a complex social act involving human beings, the overlap is inevitable. The overlap is also inevitable due to the comprehensive coverage. Cross referencing has been provided to assist the readers in establishing meaningful interrelationship.

After going through a principle, you can reflect and place it in the map of your teaching style. A word of caution here. Some principles may not be in the repertoire of your teaching, but these may be quite important for effective teaching. Your reflection on the principle should cover whether the use of this principle will enrich your teaching style and help your pupils learn better. If so, think about what you will have to do to incorporate it in your teaching style. The following questions should be kept in view while reflecting on a particular principle or practice of effective teaching :

- Is the principle relevant to your teaching style?
Are you already practising it? Does the statement

here help you to make your use of the principle still better?

- Are the points for the practice of this principle adequate? Would you like to add any point to these in the light of your experience with teaching?
- Is this principle not a part of your teaching style? Do you feel that you should learn and use it in your teaching? What would you do to incorporate it in your teaching style? Would you like to try out first before undertaking actual journey on adoption?

Obviously, the presentation style is based on interactive and active learning approach. For the readers learning about effective teaching will be a fun. Read, reflect, review, recite, share, experiment and adopt. Your teaching repertoire will not only be enriched, but it will also be more effective. This is the goal towards which every teacher likes to move. Each of the subsequent chapters will take you a step further to achieve this goal.

Reflect and Do

1. Is the conceptual framework of effective teaching presented here adequate? Is it different from the prevalent framework?
2. What would you like to add to it from your point of view ?

Write your thinking so that you can further reflect on these as you go through subsequent chapters.

This is different from the prevalent framework of effective teaching in the following aspects:

.....

I would like to add the following to this framework of effective teaching from my point of view:

.....

Active Involvement

Active involvement of the learner is a basic condition of learning. Studies indicate that learning involves the learner in an active process of both external and internal adaptation. *External adaptation* refers to the ideas and the content to be learnt and in the modes and forms in which the content is presented to the learner. *Internal adaptation* takes place within the learner's mind as new content is assimilated and internal mental structures are modified to accommodate naturally. The pupils are seen as active processors, interpreters and synthesisers of information. They are expected to take responsibility for managing, monitoring and evaluating their own learning. They are also to play an active role in adapting the learning environment to the demands of the learning-teaching process. Obviously, pupils' ability to perform this role is influenced by their existing knowledge, skills, self perceptions of their intellectual and social competencies. The teacher's capacity to provide the condition of active involvement of students in learning in the classroom, therefore, is the key to effective teaching.

Learning is about acquiring personal meaning through external and internal adaptations. It is not memorising what the teacher lectures or what is written in the textbook. The learner knows what is to be learnt, why it should be learnt, how it is relevant to his needs, how he or she can learn better, how would he or she know

that the task has been learnt, and with whom the pupil would like to share the learning process and learning outcomes. Obviously, teaching becomes child focused. The emphasis is on learning and the learner rather than on teaching.



What is the role of the teacher in active involvement? It seems that teacher is being pushed to backstage of teaching. This is not the case. The teacher in this case also is the master of the ceremony wherein he attempts to meet individual needs along with curriculum needs. His or her partnership with pupils in teaching results in sharing of responsibility for learning. The teacher designs and provides conducive learning environment.

Guidelines

To ensure active involvement of pupils, the teacher should :

- Involve pupils to take decisions about what is to be learnt so that they do not perceive the learning task as imposed but the one they have set for themselves. If done skillfully, teachers can reconcile the curriculum and individual pupil needs easily.
- Provide to pupils the opportunity to take decisions about how the content is to be learnt. They should have a say in selecting learning activities. Obviously, it is assumed that there are activities to choose from.
- Provide opportunity for individual reflection and thinking to pupils for taking learning related decisions and seeking personal meaning in the learning task. Provide opportunity to pupils for sharing their ideas, procedures and experiences with peers in small and large groups. Social experiences enrich individual learning.
- Encourage pupils to present their positions and arguments on issues under consideration without hesitation.
- Moderate final presentation without passing value judgements like right and wrong, and correct and incorrect. It helps pupils in coming out with ideas, arguments, positions and suggestions instead of withholding them due to apprehensions.
- Provide different sources of learning and variety of learning material to stimulate pupils to think and reflect.
- Design activities for consolidation of learning towards completion of the learning task. The pupils may be required to write learning journal.
- Let them monitor their own progress in learning and evaluate both, the process and outcomes of their learning. Let them reflect on the validity of the learning decisions they take so that their decision-making ability is sharpened progressively. Encourage them

to use it as feedback to improve their subsequent learning.

These guidelines for teachers will ensure active involvement of pupils in teaching. It will improve perceptions of the pupils about themselves and develop intrinsic motivation to learn to their potential. It has been observed that pupils continue to enrich their learning after completion of the specific task because of this motivation. The motivation is not only developed but also sustained due to continuous active involvement of pupils. Effectiveness of teaching, therefore, is the natural outcome.

Reflect and Do

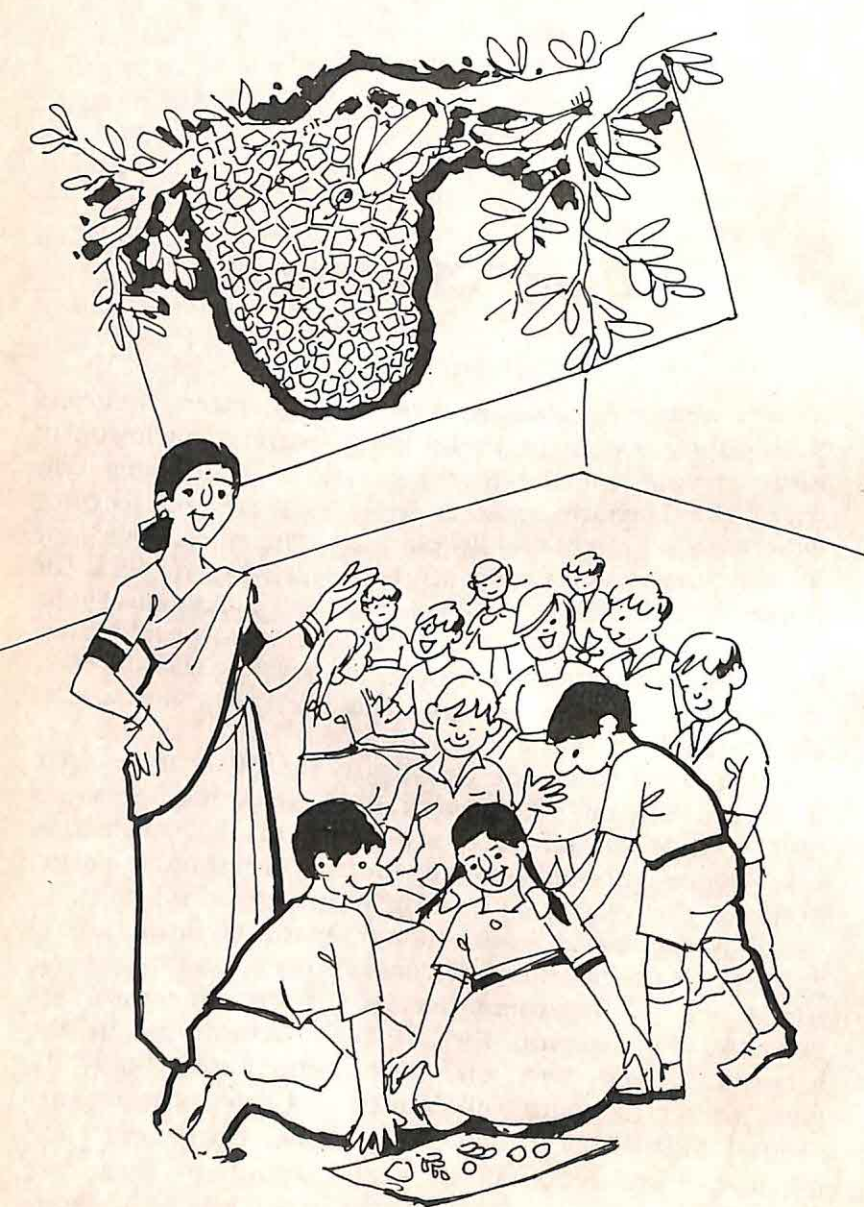
Do you involve pupils in making decisions about learning? Do you respect their opinions even if these are different from yours? Do you encourage them to choose learning activities, and learning material? If not, would you like to provide to pupils a say in learning? Would you like to try? Why not have a go?

B

Busy Classroom

An achieving classroom is a busy place. Teachers and pupils are busy in building learning environment and carrying out the learning task. It is possible only when the learning task is well designed and learning experiences systematically planned. The role of everyone in the classroom needs to be clearly spelt out. The pupils know whether they are to work individually on the textbook or workbook, worksheet, think and reflect independently, share learning resources, and interact in small and large groups. The on task time in the classroom is optimum.

Transition from one activity to the other is smooth. It is not abrupt. The instructions regarding activities and change of activities are clear so that transition takes place without confusion within a reasonable period of time. For example, shifting from individual work to small group work, instructions regarding formation of groups, clear statement of goals, processes, procedures, the mode of representation of group outcomes are essential for keeping the off task behaviours in the classroom low and on task behaviours high. In simulations, roles are well defined and rules of procedure clearly stated. In case some aids, equipment and apparatus are required for experimentation, these are kept at hand in the classroom to avoid loss of learning



teaching time. These need to be tested before use to ensure functioning. If some print or non material is required, its availability in time is ensured.

Another important factor making classroom a busy place refers to teachers keeping the whole class within eye span. Even when the teacher attends an individual child or a small group, he keeps an eye on what goes on in the classroom. He finds out who is in need of teacher's attention, who needs further guidance and help in the successful completion of the learning task, and what is required for further enrichment of resources. It reduces wait time and ensures that child is on task. Alertness of the teacher goes a long way in meeting individual needs in classroom and keeping the class a busy place.

Guidelines

Guidelines for teacher to make the classroom a busy place are :

- ❑ Ensure that the learning task is clearly defined.
- ❑ The instructions delineating learning procedure and activities are clearly stated.
- ❑ The role of the learners in the learning activities are specified unambiguously.
- ❑ The learning material is kept at hand so that it can be used without loss of time in calling these from other rooms.
- ❑ The aids, equipment and apparatus to be used in learning activities are pretested before use for ensuring functionality.
- ❑ The change of activities is smooth without any confusion and loss of time.
- ❑ Ensure that each and every pupil in the classroom is making contribution to learning and is accountable for performance and achievement.
- ❑ The interruptions and distractions in the classroom are minimised.

- Ensure business like work atmosphere in the classroom.

Reflect and Do

Visualise your classroom. Do you find it a busy place? Is every child busy on the task? Are you yourself busy to meet individual and group learning needs in the classroom and keeping them on task? Are there occasions when you feel that some time has been wasted and it could have been avoided? What would you like to do next time when it happens? Do you feel these guidelines will be helpful to make and keep your class busy in learning? Follow these and add from your ingenuity and experience. You will be on your journey to effective teaching.

C

Cooperative Learning

Almost two decades of research suggests that cooperative learning procedures result in higher pupil achievement. In cooperative learning, pupils work together to achieve shared goals and completing the learning task. Learning together and working in groups, they realise that they can achieve their goal, if other members of the group also achieve theirs. They work for outcomes that are useful to all members of the group.

Cooperative learning takes several forms. For example, pupils can help each other in understanding the material and preparing joint statements. They can also work in small groups to complete the common task using physical and intellectual resources of each member. Inter group interaction provides opportunity for larger sharing of the learnings and further refinement of small group outcomes.

The learning tasks for the groups in cooperative learning are set as projects or jigsaws. In the former all groups work on the same project for common goals which are shared in intergroup interaction. In the latter, the learning task is divided into its components and each group is assigned a component to work on. These are then put together through presentation in the large group.

The groups are formed in several ways for cooperative learning. These can be formed randomly to ensure mix

ability so that each one uses each other's resources. At the end of the cooperative learning heterogeneity in the task area is reduced to the minimum. The groups can also be formed on voluntary choice of the learners or these can be purposive for specific goals. The formation of groups should be dynamic and responsive to the task with the caution that cliché formation reducing efficiency of the group should be properly managed.



Cooperative learning should be evaluated in terms of both outcomes as well as procedures. The latter helps in refining cooperative learning procedure and adapting them to the requirements of a particular classroom and school environment. It should also attempt to assess to what extent pupils would like to use it as a learning procedure. It is an indicator of their motivation and interest in the promise of this procedure as a learning instrument.

Guidelines

The guidelines for use of cooperative learning in effective teaching are :

- ❑ Select the learning task for cooperative learning.
- ❑ Select format of the cooperative learning, project or jigsaw.
- ❑ Set the learning task. Each group is required to come out with a product, object, ideas or plan. State the goals clearly.
- ❑ Form small groups of 3-4 for cooperative learning.
- ❑ Explain pupils functional behaviours in the cooperative learning task like :
 - (a) each group member gives other member help to complete the shared task;
 - (b) each group member seeks help from the other without hesitation;
 - (c) no group member changes his or her position on issues without persuasion by other group members; and
 - (d) each group member owns the outcome.
- ❑ Ensure accountability of each group member to achieve the shared goal.
- ❑ Provide access to material and other learning resources to the group.
- ❑ Encourage individuals and groups to share learning resources and ideas.
- ❑ Manage dominance of an individual in the group by assigning the individual the role of giving reinforcement to contributors in the group. It will require him to listen other's for reinforcement.
- ❑ Manage noise level through assignment of responsibility to a group member to inform group members, if the noise level reaches beyond a certain level, ensure that other groups are not disturbed.
- ❑ Evaluate cooperative learning experience considering such questions as :

Has the group come out with the product it set out to produce or create?

Does it have contribution from each member?

Would you like to work individually or cooperatively to complete subsequent learning tasks?

What did you like about working cooperatively?

What did you not like about working cooperatively?

Cooperative learning is an effective teaching procedure. Alongwith individual needs, it helps in meeting collective learning needs of groups of pupils. Teaming and sharing of ideas and resources have promise of emotional integration and learning democratic skills. The clarity of group goals and individual accountability are two essential conditions for its effectiveness. To pursue the goal of organising schools ensuring quality education for all, it is a useful practice.

Reflect and Do

Do you use cooperative learning procedures in the teaching? If not, would you like to? If yes, do you find these useful? How are these helpful? After reading the guidelines do you feel reviewing these and work out some action to further improve? Why not try from today?

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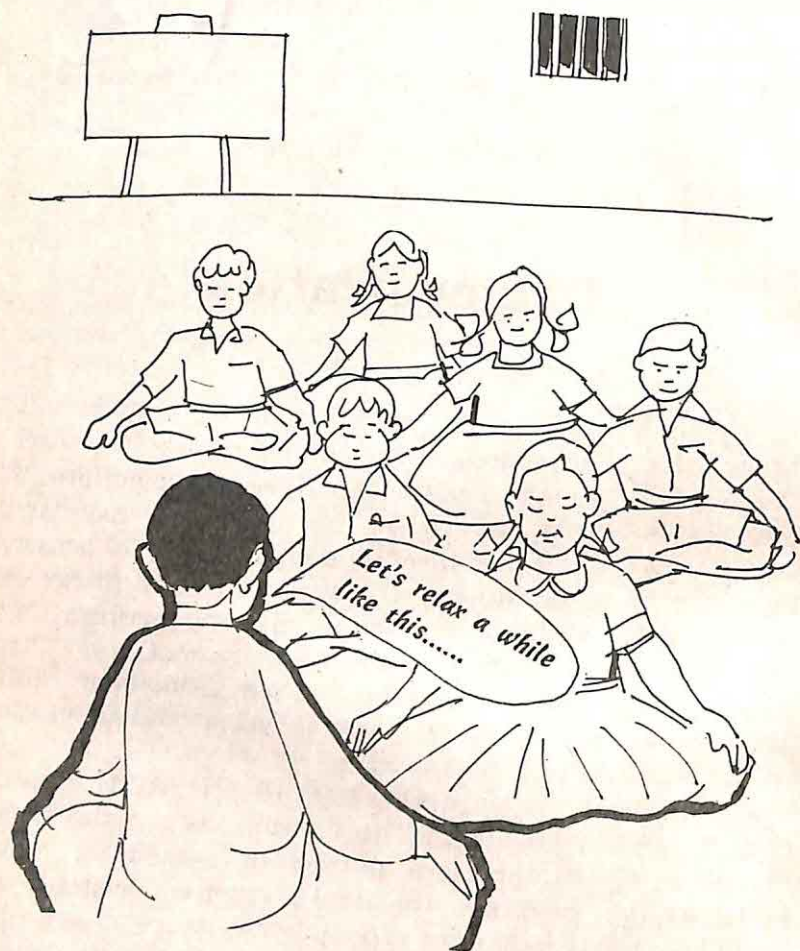
Demonstration

Demonstration can be viewed from two angles. As is known that it originated in the context of practical work. The teacher demonstrated the experiment to be performed. The pupils learnt how to set up apparatus and carry out experiments. It also involves demonstration of activity or a role to be performed. The model of performance is presented for imitation by the pupils who perform and reperform with feedback to acquire mastery. This dimension of demonstration is called modelling. Both are required in effective teaching. It has special relevance to the learning of process skills.

It involves presentation of the learning task, opportunity for the learner to closely observe the task being performed, prepares himself or herself for task performance, performs the task, receives systematic feedback and reperforms. The process is repeated till the pupil performs to the model presented through successive approximations.

The model can be a teacher or teacher aid, a peer, a parent or even a community member (say a local artisan for work experience or a master in any vocation). Similarly, feedback can be self feedback, peer feedback, teacher feedback, audio visual based feedback using recordings, or a combination depending on what is being learnt through a model. The feedback is provided

immediately after the performance and, if the skill is complex, even at different stages of the performance.



In the case of experiments or practical work in which equipment and materials are to be used, these are to be tested for functioning before the demonstration and kept at hand to save time. The pupils should be actively involved in demonstration activities and presentation of the models. For example, they can be required to explore the equipment and materials before and after the experiment or practical work. Pupil can demonstrate

under the guidance of the teacher in small groups or the whole class. Safety precautions, however, are to be ensured. Similarly, pupils can also be involved in the presentation of a model.

Guidelines

The guidelines for demonstration or presentation of a model in teaching are :

- ❑ Select the learning task which requires demonstration or presentation of a model.
- ❑ Spell out specific objectives.
- ❑ Spell out instructions for different roles in the model to be presented.
- ❑ Identify equipment, materials and apparatus required.
- ❑ Identify the audio-visual material required for presentation of the model.
- ❑ Ensure access to equipment and material and availability for the classroom. Also pretest for proper functioning.
- ❑ Prepare pupils for the demonstration with questions about what they should observe. Explain the role of the pupils if involved in the demonstration or presentation of the model.
- ❑ Present demonstration or the model highlighting essential components, the sequence of the process activities, and precautions, if any.
- ❑ Put questions to pupils to anticipate outcomes of the demonstration at appropriate stages to stimulate their thinking and sustaining attention and motivation.
- ❑ Provide opportunity for post demonstration or model presentation discussion for clarifications and supplementation.
- ❑ Repeat demonstration by a pupil, if necessary.
- ❑ Evaluate the process of demonstration or model presentation.

The success of the demonstration or model presentation depends on how pupils can plan and perform. It has a place in effective teaching in different curriculum areas including physical education and sports. Planning and pupil involvement enhance its effectiveness.



Expectations

Expectation to succeed has been found to be related to learning. Effective teachers have a sense of optimism. They are sure of their success in teaching and are sure that they can lead pupils to success in learning. They enter the classroom with confidence, optimism and enthusiasm.

The optimism and confidence are reflected in the way the teachers talk in the classroom and the way they move about. The facial expressions and their body movements indicate that they will certainly make a difference in the classroom. The pupils smell teacher optimism which give them the courage to take risks in learning, try their own ways, use their learning strategies, use initiative, and solve problems. They not only complete the learning task successfully, but also achieve mastery.

It is a well-known fact that learning in adults and children is about taking risks. It is about having a go when one is not sure whether something will work. In this situation risk taking rather than hesitation is mostly productive. Risk taking in the classroom is likely, if there is an atmosphere of encouragement and support. The teachers provide such an atmosphere through high expectations.

The expectations of teachers about success of pupils progressively increase. The use of expectations in teaching is possible, if the teacher accepts his role as a learner, learner of not only content and methodology, but also

of pupils and the classroom milieu. It helps the teacher to graduate expectations.



The teacher who conveys lack of confidence, hesitation and doubt about their ability to succeed fail to motivate pupils to successful learning experiences. They usually do not motivate all pupils to take risk and initiative to solve problems. As a consequence, learning and achievement in their classroom remains low. High expectations from pupils, therefore, constitute essential component of effective teaching.

Guidelines

The guidelines for teaching with high expectations are :

- Exude confidence to succeed in teaching.
- Make the optimism and confidence to succeed visible to pupils through
 - (a) talk;
 - (b) movements; and
 - (c) gestures.
- Expect pupils to succeed in completing the learning task.
- Let pupils know the expectations and optimism.
- Verbalise expectations whenever and wherever necessary.
- Gradually raise expectations about pupil learning beyond their existing level reaching high level of expectations to motivate them to achieve excellence.
- Have expectations about both individual and group learning.
- Have expectations about pupil success in all the three areas of learning, namely, intellectual, skills, attitudes and values.
- Encourage children to take initiative and take risks in learning.
- Encourage pupils to take learning related decisions individually and in groups.
- Instead of discouraging for failure in learning task due to the use of wrong strategies, guide them to reflect and think afresh to select alternative strategies to complete the learning task successfully.
- Provide the same atmosphere of learning for your pupils that you want for yourself.
- Support personalised view of learning by pupils.

Reflect and Do

Do you have high expectations of your pupils? Do you remain optimistic about their success? Do your pupils confirm your optimism? The guidelines will help to keep up your optimism and expectations about the success of your pupils.

F

Feedback

Feedback is the flow of information about performance. Each learner likes to know about his or her performance. Is he or she progressing well? Is he or she correct? If not, what is the error? If the learner knows that he or she is progressing correctly, the knowledge reinforces and the motivation to complete the learning task is not only sustained, but also increases. If the learner knows about the error, he or she tries to correct.

The urge to know about the performance is almost universal. The actor gauges audience reactions immediately after performance. The debater looks expectant after making a point in a speech. The teacher reads pupil facial expressions after explaining a point to be sure if they have understood the explanation. Same is the case with learners in the classroom. They are eager to know about the progress they make towards completing the learning task.

Feedback is an essential component of effective teaching for both, the teacher about the success or otherwise of the teaching strategy, and the learner about the progress of learning. The teacher receives feedback from pupil verbal and nonverbal behaviour in an informal way through observation. The teacher also receives feedback through asking learning task related questions. The pupils also receive feedback from teacher's verbal and nonverbal behaviour as well as through responses.



The teacher has to plan feedback to the learner keeping such questions in consideration as: Is the pupil proceeding rightly in the learning task? Is it according to the plan with which he or she is proceeding? Is the learner moving towards correct solution? Are the steps correct? If not, review and see how to guide the pupil to correct solution. If it is correct, encourage the pupil to move on. A word of caution here. If the learner is sure, let him or her complete the task through self motivation. Encourage only, if you find the learner hesitant to proceed.

Differentiate between feedback and reinforcement here. Both are taken to be synonymous and used

interchangeably many a time. Reinforcement is only one dimension of feedback. Knowledge about the correctness in itself may become a source of reinforcement. Encouraging and praising behaviour may be used as reinforcement. Feedback is much more than reinforcement. It is a steady flow of information about the performance. It informs the performer the exact errors committed in performance for correction. Reinforcement is motivational which reduces or increases vim and vigour to complete the learning task while systematic feedback provides information about the performance.

The feedback can be provided through both formal and informal means. For example, the learner proceeding correctly may receive a teacher smile, a nod, a pat, and goes ahead intrinsically motivated. The teacher may point to an error or puts a question making the pupil conscious of the error and the pupil starts corrective measures. The peers can also provide feedback, if properly planned. Formal feedback can be through tests and quizzes. Feedback mechanism is also built into the self instructional material. The feedback is to be provided immediately.

Guidelines

The guidelines for providing feedback to the pupils are:

- ❑ Select appropriate points at which feedback is to be provided.
- ❑ Monitor pupil progress on the learning task closely for providing feedback at unanticipated points, if needed.
- ❑ Decide about the mode of providing feedback, verbal, nonverbal, formal test, self feedback or peer feedback.
- ❑ Decide whether feedback is to be provided individually or in group. It depends on the learning task.
- ❑ Decide whether feedback is to be provided publicly or in private. Some children feel embarrassed in public. For these, it can be in private till they are ready for public feedback.

- ❑ Provide the feedback immediately.
- ❑ Ensure that feedback has been registered with the learner. Watch for effectiveness of the feedback.
- ❑ Make feedback positive and constructive.
- ❑ Encourage pupils to correct or reperform to achieve mastery over the learning task.
- ❑ Encourage use of feedback for enrichment of learning experiences to motivate learner to go beyond the learning task to achieve excellence through initiative to relate it to wider or and futuristic environment.

Systematic and specific feedback increases the motivation to continue with the learning task and chances of success. These guidelines will go a long way in improving feedback procedures and their use for increasing learning and achievement in the classroom.

Reflect and Do

Do you regularly provide feedback on the learning process and outcomes to your pupils? How do you provide feedback? How do your pupils feel about feedback? Would you like to add variety to feedback procedures in your classroom? Will these guidelines be helpful? Surely these will. Why not enrich your repertoire?

G

Goal Setting

Goal setting and objective specification are first steps in effective teaching. Clearly stated realistic goals set the stage for learning. The process of setting goals is equally important. The process should be such that the pupils understand the purpose underlying the goals and the task set for learning. How can teachers ensure pupils' understanding of the goals? It is mostly a matter of style and the preference teachers have. For example, some teachers tell directly what is to be learnt. They explain the purpose. They do so mostly guided by the syllabus to be covered. The pupils are not much involved in decision-making. There are teachers who have less direct style and encourage pupil participation. They allow discussion and negotiation with students. Both try to help students understand the nature and purpose of the task, but the latter seems to be more conducive to derive personal meaning. Effective teachers stress meaning in work.

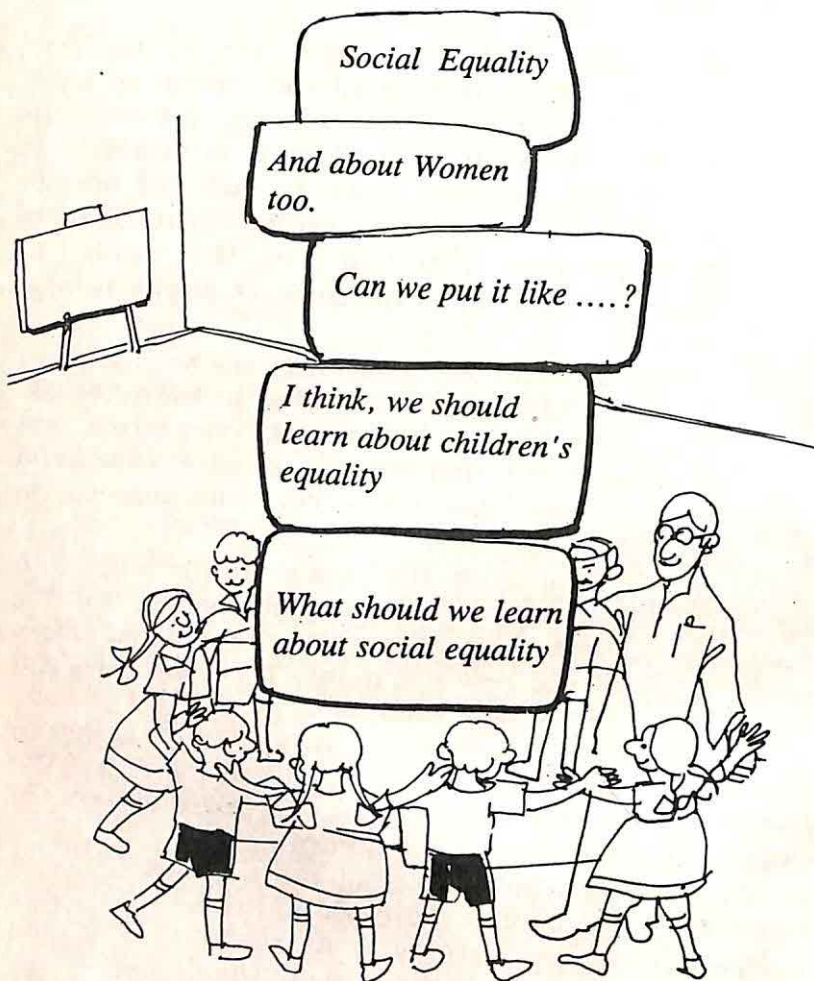
The task is to be set at realistic level of difficulty. It should not be at a level that is too difficult to achieve pushing the learner to frustration and abandoning the task in despair. It should also not be too easy failing to offer a challenge to the learner. The setting of realistic task in a heterogeneous class is not really easy, but effective teachers manage it. Usually, the learning task is considered at three levels:

1. *Frustration level:* The pupils are so far from understanding the material and commit so many errors that progress towards the set goals is unlikely. In such a situation it is desirable to review the goals and break the task into smaller units. Use of alternative learning material more appropriately matched to the level of understanding and experience of pupils is also helpful.
2. *Instruction level:* At this level pupils need support and assistance in understanding the learning task. The pupils may be committing some errors, but it is expected that with reasonable effort and within reasonable time they will succeed in completing the task.
3. *Independent level:* The pupils are thorough with the initial stage of understanding the new learning task. They need opportunity to practise ideas and skills to new situations. They overlearn and can apply to new situations.

Obviously, setting goals and tasks should take into account individual needs of all pupils in the class. The teacher takes into consideration the existing level of pupils, their interests and attitudes.

In planning teaching logical order seems to be a sensible idea. It implies the goals and tasks may follow a logical order and, at the same time, these should meet individual needs of the learner. The sequence may indicate progression of the complexity of the task. Negotiation of objectives helps in this endeavour. It also contributes to pupils discovering personal meaning in the objectives and tasks set for learning. Individual needs are basically met through following different routes for the same objectives. Pupil involvement in a good setting, therefore, is very important.

The goals are to be set clearly. Clarity of goal has been found to be related to pupil learning and achievement. It helps pupils understanding the task. They unambiguously know what is to be learnt.



Guidelines

The guidelines for goal setting for pupils to ensure effective teaching are :

- Be clear about the goals and the tasks to be set.
- Involve pupils in formulating goals through assessment of expectations.
- Take special needs of pupils in the classroom into consideration to set goals.

- ❑ Negotiate goals for the class as well as for individual pupils.
- ❑ Take into account the existing experiences, interests and attitude of learners for setting goals.
- ❑ Set goals that are realistic to achieve.
- ❑ Sequence goals and the tasks in logical order.
- ❑ Make relevance of goals to individuals and their realistic level clear to pupils.
- ❑ State the goals clearly to be unambiguously understood by pupils.
- ❑ Review goals as the task progresses to respond to individual needs in the classroom.
- ❑ Break the task into simpler steps, if the task is too difficult.
- ❑ Identify alternative material for achieving the same goal. In other words, match material with goals.

Reflect and Do

Do you set goals in the classroom? Do you involve pupils in the classroom in goal setting? Do you set goals for pupils in the classroom who have special needs? How do you achieve goal setting to meet individual and group needs?

To make teaching effective teachers can formulate realistic goals through the involvement of and negotiation with pupils. Reconciliation of competing individual needs and selection of appropriate learning procedures to meet individual needs will improve class achievement.

H

Humour

Class is a busy place and learners are involved in serious work. Despite the fact that learning is fun and teachers do make teaching interesting, it requires constant attention, and intellectual and physical energy. There are times when stressful situations arise in the classroom. These factors set fatigue in pupils which is likely to bring down their efficiency of learning. It is on these occasions humour is essential to effective teaching in the classroom.

Humour in the classroom releases tension, creates conducive climate and relieves fatigue in pupils. They can restart with renewed vigour to complete the task. There are other fatigue relieving measures, but it has also certain other concomitant outcomes. It does not replace other strategies, but compliments them.

Humour in the classroom is effective, if it is not at the cost of a particular pupil or group of pupils. It should be short and sweet. It should not be a prolonged affair to distract pupils from their work. It should be a brief affair with teacher bringing back the class on task immediately the purpose is served. It should never be vulgar and hurting.

Guidelines

The guidelines for teachers to use humour in effective teaching are:

- ❑ Decide the critical moment in teaching when humour is appropriate.



- ❑ The humour can be appreciated only if most of the pupils understand the point of humour.
- ❑ The context of the humour should be within the experience and intellectual range of pupils.
- ❑ Humour should be culture appropriate. Some humours good in one culture misfire in another. Sometimes it can be hurting to a group.
- ❑ Humour should not be at the cost of pupils.
- ❑ Humour should not be unduly prolonged which will distract the pupils beyond tolerance limits. Bring back pupils on task as soon as purpose of humour is served.
- ❑ Watch effect of the humour on pupils for any sensitivity

Reflect and Do

Do you humour? Do you laugh? Do you humour only outside classroom and school? Do you laugh with your pupils? If not, see if you can humour and laugh with pupils in the classroom. Write journal on humour in the classroom, context and effect. Compile a book on humour in the classroom. A non existent but much needed document!

I

Individual Needs

Pupils are individuals. They vary in their level of intellectual functioning and physical capacities. They have individual needs and interests. They also have individual learning styles and preferences. Traditionally, classroom teaching has been visualised for the mythical average learner. Naturally, the learners at both ends of the continuum get ignored. It tends to result in frustration of failure at the lower end of the continuum while it results in underachievement due to lack of challenge and motivation at the higher level of the ability continuum. In recent years, it has been revealed that class achievement is higher in classrooms where individual needs are met in teaching.

Effective teachers have been found to be sensitive to individual needs of pupils. They select teaching procedures responsive to individual needs and learning styles. There is focus on common goals but individual goals are also not ignored. Negotiation of objectives and variety of teaching activities help the teacher in achieving the goal of meeting individual needs in the classroom.

Individual needs are met not only in taking goal related decisions, but also learning activity decisions. There is an opportunity to choose from. The pupils are involved in the process of selecting and planning learning activities. They are also involved in taking decision on evaluation policy. They participate in evaluation and

review process. Individual reflection and sharing meet both individual and group learning needs. It enriches self as well as learning of other pupils. Individual needs contribute to learning and achievement of the class as a whole.



For meeting individual needs it is essential that the teacher knows pupils, their needs and interests well. They keep the class within eye span to monitor individual progress and needs expressed during completion of the learning task. The teacher designs a mechanism through which children, unhesitatingly express their needs in the classroom. It requires classroom trust and atmosphere of encouragement in the classroom. The teachers can collect information about individual needs through observation of learning behaviour, interaction with the pupil, and written reports, besides being approached for individual help directly.

Doubts are usually expressed about the feasibility of meeting individual needs in large and crowded classes, and multigrade teaching in small schools. The pedagogy is now available for meeting individual needs in both

situations. Child-to-child approach in teaching, peer tutoring, help from other adults (parents or community members, teacher aids, wherever feasible). Self learning and interactive technological devices, are quite helpful in meeting individual needs in the classroom. Teacher alertness, sensitivity to individual needs and ingenuity to overcome constraints are required to achieve this highly desirable goal of teaching. Heterogeneity in the classroom can be used as a resource rather than constraint in meeting individual needs.

Guidelines

The guidelines for meeting individual needs in the classroom to improve teaching effectiveness are:

- ❑ Be sensitive to individual needs in the classroom.
- ❑ Know the children, their interests and attitudes, strengths and limitations.
- ❑ Identify individual learning needs alongwith socio-emotional and physical needs through:
 - (a) observation of pupil behaviour;
 - (b) interaction;
 - (c) written reports; and
 - (d) appropriately designed reaction sheets.
- ❑ Involve pupils in deciding goals and selecting learning experiences.
- ❑ Provide variety of learning experiences and learning material.
- ❑ Keep track of progress of each child to identify learning difficulties and providing assistance to pupils.
- ❑ Provide opportunity for negotiation at different stages of the learning task.
- ❑ Encourage children to interact and share learning experience, and seek help from other pupils and provide help to others.
- ❑ Seek support from other teachers in a learning area, if required, wherever it is feasible.
- ❑ Seek support from parents and other community members who can act as teacher aid.

- ❑ Adjust and adapt instructional method and material to individual needs, wherever required.
- ❑ Use variety of learning material in different communication modes. Use technology aids, wherever available.
- ❑ Use pupils in evaluation of learning and decisions about how it can be used in acquiring mastery over the learning task.

Reflect and Do

Do you teach the class or the child? Do you allow pupils to express their needs? Do you plan for meeting special needs? Have you tried? Did you succeed? Did you give up after a few try outs due to difficulties encountered? Do you feel you must do it? Would you like to do it after going through guidelines? Try with the expectation to succeed. Add your experience to these guidelines.

J

Journal of Learning

Learning can be consolidated with reflection on outcomes and the process of learning after completing the task. Writing journal of learning is considered one of the important post teaching-learning activities. The pupil reflects on the process and outcomes of learning keeping such questions in mind as: What did I learn? What should I retain? What is so significant that I would like to share with others? What was the most interesting learning experience? How do I like to use my learning? Such an exercise is helpful in enrichment of the experience for use in relevant situations. Naturally, it contributes to improvement of learning and achievement of pupils.

Obviously, learning journal is a form of diary, a personal diary carrying personal meaning that pupils find in learning. They write about their priorities in learning, express individual learning needs, preferences for learning, and evaluation of the process of learning, their likes and dislikes. Through this instrumentality, the teachers seek to develop purpose of learning in pupils and encourage them to take responsibility for their learning. It is always useful to allow time, sometimes inside or outside the classroom, for pupils to write the journal of learning on voluntary basis. The pupils can also be asked to read extracts from their learning journal and share with others including teachers purely on a

voluntary basis. They can choose peers or other persons with whom they would like to share.



The pupils can be provided framework for writing the journal of learning. The journal can be built around such areas as: the ideas they would like to remember, questions they would like to think about, leads to follow-up, points to share with peers and reactions to learning procedures.

Guidelines

Guidelines to use the journal of learning in effective teaching are:

- ❑ Encourage pupils to write journal of learning regularly. They should inculcate this habit.
- ❑ Provide framework for writing the journal of learning.
- ❑ Provide time for writing journal of learning at appropriate stage during teaching (at the end of the learning task, a set of learning tasks or a learning unit).
- ❑ Encourage individual styles of writing journals of learning by pupils.
- ❑ Provide opportunity for sharing journal of learning with individual peers, small groups and with teachers individually or in groups as pupils like to share.
- ❑ Monitor individual learning needs as pupils share learning journal.
- ❑ Provide an atmosphere of trust and encouragement for uninhibited sharing of the learning journal.
- ❑ Provide opportunity for sharing reactions and feelings about writing learning journal with peers and teachers.
- ❑ Avoid value judgements on ideas expressed in the learning journal when these are shared.
- ❑ Allow pupils to discuss about writing journal as a component of overall learning strategy in the classroom.

The learning journal is a tool to identify and meet individual needs. It can be used for negotiation of objectives and learning experiences.

Reflect and Do

Do you write learning journal yourself? Do you encourage pupils to write learning journal? Do they write learning journal regularly? Do they keep the points outlined here in view in writing the learning journal? How do you use the learning journal you write? Do pupils share their learning journal with you? How do you use pupils' learning journal in teaching? What will you do, if your pupils do not want to share learning journal with you? How will you encourage pupils to write learning journal, if they are not doing it already? Will these guidelines be of help to you in teaching? Why not use and observe its effectiveness in teaching?

K

Knowing the Learner

As we know effective teaching is about matching teaching procedures to objectives and learning styles of pupils. It is also about meeting individual needs in the classroom. Both can be achieved only if teachers know their pupils. Planning and organisation of learning activities require knowing children well. The teacher should know what they are able to do, what they like to do, how they like to do better, what are their interests and previous experiences? This knowledge helps the teacher in setting learning tasks that are both realistic and challenging to the learners.

The teachers should know the following about the learners:

1. *Previous experiences:* Every pupil brings to school a range of experiences that serve as foundation for further learning. If the teacher knows, these can be utilised effectively for enhancing learning.
2. *Existing knowledge and skills:* It is also important to know what pupils know already taking decision about what should be taken up next. It has been demonstrated that previous knowledge and skills required for the new learning task explain considerable variation in pupil achievement. It is obvious, for example, a child must have acquired the knowledge of base ten for learning the concept of carry over in addition.

3. *Attitude and interests:* Most of the children who come to school are eager to learn in the beginning. They feel excited and brim with enthusiasm. But it starts downward slide if his or her needs are not met in teaching. They develop negative self concept as a result of repeated failure in completing the learning task. It is, therefore, essential that teachers should sustain their motivation to learn. The teachers should know attitudes and interests of their pupils to achieve this goal.



There are various ways to know pupils. Teacher tries different approaches. For example, they allow pupils to

write about their expectations individually and share in small groups. Some teachers devote about a week to engage pupils in writing about their classroom, themselves and home environment. Themes like, what I would like to do, the classroom I like most, the most unpleasant classroom I encountered, the happiest incident in the classroom, the saddest incident in the classroom, the most pleasant aspect of my family, the most disturbing thing at home, etc. are given for writing. Drawings of classrooms and homes also can be used to study feelings of pupils. These writings, observations and occasional personal interactions give a fairly good idea about pupils needs and interests. For the assessment of existing knowledge of pupils, quizzes and tests are good source of information. As teaching progresses, the teacher acquires more and more knowledge about the pupils' level of functioning.

Knowledge about pupils is helpful in setting realistic learning goals and learning tasks, selecting learning activities matched to pupil learning preferences, negotiation of objectives and teaching procedures, and adjustment and adaptation of learning experiences to meet individual needs in the classroom.

Guidelines

The guidelines for knowing the learner well are:

- ❑ Collect as much information about nature and needs of individual learners as possible.
- ❑ Use both informal and formal ways to collect information about the learners.
- ❑ Relate existing knowledge and skills of the learners to the new learning task.
- ❑ Use information about nature and needs of learners in setting goals and planning learning activities.
- ❑ Update knowledge about pupil interests, needs and attitudes continuously.
- ❑ Share knowledge about nature and needs of learners with others involved in teaching pupils inside and outside the classroom.

- The knowledge about learners is useful at all stages of teaching right from planning, through teaching, to evaluation. Their learning preferences and teaching styles can be matched by judicious use of this knowledge.

Reflect and Do

How do you try to know your pupils? Do you talk to them? Do you ask them to write about their experiences and feelings? Do you maintain some record about unique pupil needs in your learning journal? Do some of your children have special needs? What are these special needs? Do you use some formal ways to identify special needs? How do you use this information in teaching in the classroom? Can this chapter help in your teaching? Draw up your plan to know more about the needs, interests and previous experiences of your pupil. Write in your learning journal how it has been useful in making your teaching more effective?

L

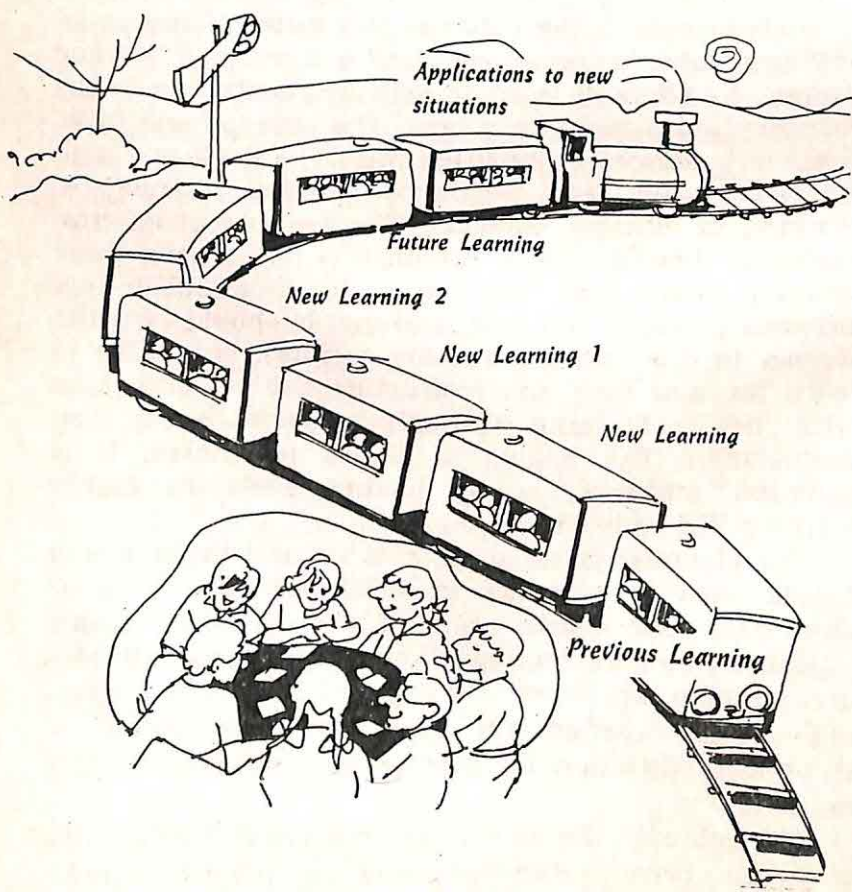
Linking Learning

Achievement is the outcome of a series of sequential learning tasks. Learning task itself is a series of learning events. A variety of learning activities contribute to the learning and mastery of a task. The learning and tasks are not discrete entities in themselves. The interrelationship and sequence provide meaning to learning in different contexts. The purpose of effective teaching, therefore, is to establish a link among these learning events and tasks. It seeks to establish link between previous and new learning. It should help the learner to draw on the existing cognitive structures to learn the new task and restructure the cognitive map with new learning through accommodation and assimilation. The linking is always not linear. It is complex. Multidimensional linking leads to higher learning like problem solving.

For planning of teaching, it is natural to attempt a logical order or sequence in which the task is to be carried out. The sequence should indicate the increasing complexity building on pupils knowledge, skills, attitudes and previous experience. The curriculum itself is a series of sequenced experiences to realise educational objectives. It provides direction for linking learning and learning activities.

Undoubtedly, the issue of progression and sequencing is complex because different pupils can achieve the same

goal by following quite different routes involving different procedures. This variation needs to be taken into account. There are also some areas in curriculum which are not amenable to a fixed sequence. That is why multidimensional linking is required in teaching. Variety of learning activities, negotiation of objectives and procedures, concurrent accommodation and assimilation tasks, teaching evaluation and feedback, reflection and recording in the journal of learning, facilitates establishment of links in learning. Linking is a continuous process which should be planned for integrative learning in teaching.



Guidelines

Guidelines for establishing links in learning events, tasks and activities for effective teaching are:

- ❑ Identify curriculum areas which are amenable to sequential learning.
- ❑ Identify link points both in vertical sequence and horizontal expanse of the curriculum.
- ❑ Identify linking needs in teaching sequences.
- ❑ Plan for linking present learning not only with previous learning having immediate relevance to learning of the new task, but also with comparatively remoter previous learning for accommodation and assimilation.
- ❑ Provide for intra lesson linking of different learning activities in a sequence.
- ❑ Direct pupils to link the present learning to future learning through reflective questioning.
- ❑ Provide for application of learning to new situations.
- ❑ Monitor effectiveness of linking of learning both ways, backward and forward.

Linking of learning is essential for assimilation and application to new situations. These guidelines provide useful tips for effective linking in teaching,

Reflect and Do

Do you make systematic linking of learning tasks and activities in teaching? Do you like the new learning task to previously learnt task and next learning task? Is it possible to link all learning tasks? Do you find that some are not amenable to linking? What are these tasks? Think about in the light of what has been presented in this chapter. Will it take you towards effective teaching?

M

Management of Resources

Teachers face pressure from different sources. For example, the curriculum load is increasing fast but time for covering it remains practically constant. The class size is increasing due to constraints of resources and population pressure. The teachers have also to teach more than one class in small schools in rural and remote areas. Multigrade teaching is likely to continue for a considerable period in over fifty per cent primary schools. The teachers in schools have little spare time due to teaching load. Not more than one period a day may be off for teachers and even this is lost in substitute teaching. The teachers have to manage their classrooms within these constraints. How to ensure effective teaching within these constraints is a challenge before teachers.

Teaching is about the use of time, use of time by both, teachers and pupils. On task time also contributes to pupil learning. Well organised classes aim at effective use of time. The class is a busy place. To keep it busy within the constraints is the goal. The most important resource is the pupil. The pupils are seldom used as learning resource, and much less in teaching. It is believed that children do not learn without teaching. The pupils do learn many things without teaching. If learning experiences are properly organised and teaching situation appropriately designed, pupils can learn a lot independently. Secondly, mutual help from each other

in learning is also feasible. Cooperative learning procedures provide opportunity for learning from each other. Peer tutoring is another important resource in teaching. Here one child tutors another child to understand learning material, overcome learning difficulty and acquire mastery over the learning task. Child-to-child approach in teaching is yet to be fully exploited for supplementing teacher inputs within the limited time available in school.



Similarly, correction work is too demanding in large size classes. The assignment with self correcting provision can be given. Self correction may, however, not be possible for all learning assignments. Pupils may be involved in correction of the learning assignments. They may be involved in correcting own assignments as well as in correcting each others' assignments.

The material required for learning tasks can be so placed that it is accessible to pupils when required. If it is to be brought from another room, it should be done

in advance so that time is not lost at the time of its use in teaching. It should also be checked for functioning beforehand.

For organising activities, the purpose should be explained clearly. Instructions for carrying out the activity are clearly stated so that change of activities is smooth and time is not unnecessarily wasted. Smooth transition of activities without any confusion represent effective classroom management.

Team teaching in selected areas where classes can be grouped for common learning activities is another way to overcome time constraint. Such grouping is also relevant in multigrade teaching situation. Planning by the concerned teachers cooperatively is needed for effective team teaching. It is also possible to mobilise parents and other willing community members to act as aids to teachers. Management of resources, particularly time and teacher resources, is crucial to effective teaching.

Guidelines

The guidelines for management of resources in the classroom are:

- ❑ Treat time as a classroom resource.
- ❑ Treat pupils as a resource in teaching.
- ❑ Identify resource needs of a particular task. See what is already available and what is to be brought into the classroom.
- ❑ Check for functioning of the equipment and apparatus in advance.
- ❑ Make equipment and materials accessible to pupils for use.
- ❑ Give clear instruction to pupils about what they are expected to do in the learning activity.
- ❑ Develop mutual trust. Encourage pupils to independent learning.
- ❑ Use pupils as a resource in teaching. Encourage cooperative learning and peer tutoring.
- ❑ Involve pupils in all activities.

- ❑ Arrange smooth transition from one activity to another with minimum change over time. Clarity of instructions will be helpful in this.
- ❑ Organise classroom, including seating arrangement, with built-in flexibility for a variety of learning activities.
- ❑ Ensure that pupils' time is fully and meaningfully utilized in the classroom.
- ❑ Encourage self correction and mutual help in correction.
- ❑ Involve pupils in scoring quizzes and tests.
- ❑ Keep all pupils within eye span for monitoring their learning behaviour and individual needs.
- ❑ Tackle disruptive behaviour immediately, if needed by direct telling.
- ❑ Move about in the classroom to provide assistance to individuals and groups.
- ❑ Mobilise help in the classroom from willing parents and community members.

The management of resources in the classroom can be helpful in reducing teacher burn out. Its use ensures effective teaching.

Reflect and Do

How do you manage full time for learning in your classroom? Do you use your pupils as resource? In what ways do you use them? Have you to teach more than one class? How do you organise them? What do you do to manage disruptive behaviour in the classroom? Are you in a position to cover the syllabus? Do you have pressure of time? Are you sure that pupils have learnt, if you are successful in covering the syllabus? Do you think that the suggestions here will help you in review of your classroom management practice? Review and try to feel the path of effective teaching.



Negotiation

The teachers have agenda of curriculum for teaching. They anticipate pupil needs and plan teaching to take care of these pupil and curriculum needs. Meeting individual needs in the classroom alongwith ascribed curriculum needs depends on the precision with which the teachers can assess pupil needs and the extent to which they can accommodate these needs. Despite precise planning some individual needs are overlooked and some are expressed as teaching progresses. Negotiation is required to ensure that the pupils can express individual needs and teaching can be made responsive to individual needs in the classroom.

Negotiation with pupils is required for goal setting in the first instance. It is also required for setting the learning task. As pointed out earlier teachers have ascribed curriculum agenda. The framework for goal setting is already available. Negotiation is required for the accommodation of individual needs. The pupils are, therefore, involved in decision-making for spelling out learning goals. In the process they become conversant with what has been planned and perceive the extent to which their own needs are reflected in the goals. Some unique individual goals based on specific interests and needs, for example, those arising from special needs, may not be accommodated in the general statement of class goals, but will be covered in teaching. The

classrooms are organised to meet educational needs of all pupils. The pupils with special needs get the confidence that they are not left out, their needs will also be met. Negotiation for individual goals will also continue during teaching in the light of monitoring of progress and the extent to which pupils feel that their individual goals are met.



Negotiation is also required for learning activities. Individual goals are met through using a variety of activities. Which learning activity is going to meet needs of particular pupils comes out of negotiation. Pupil involvement in selection of activities provides a sense of personal satisfaction and personal meaning a pupil derives through participation in the selected learning activity. They also become aware of the variety of learning

routes available to achieve their goals. The reflection of pupils on the process and organisation of these activities further prepare them for negotiation.

The pupils should be involved in negotiation about evaluation of outcomes of learning. They will perceive evaluation and assessment not as external tools to control them but perceive them as instruments of learning through feedback.

The negotiation skills, decision-making skills and the courage to express individual needs are the outcomes of the process of negotiation. It leads to internal locus of control. The pupils take responsibility for own learning. Besides, skills of democratic functioning and working together also develop in children.

Guidelines

The guidelines for the use of negotiation in effective teaching are:

- Be clear about the objective and scope of negotiation. Make these clear to pupils.
- Plan for negotiation of group and individual objectives.
- Clarify how some of the individual objectives are met in group instruction and how goals unique to individual pupils will be met through individual activities.
- Use an expectation sheet and ask for sharing and negotiation within peers and small group before sharing with you and the larger group.
- Provide for individual negotiation as teaching progresses.
- Negotiate choice of learning activities from those given by you. Also list activities that pupils think that will help them in carrying out the learning task.
- Allow pupils if someone thinks that he or she can achieve the learning objective through a unique alternative activity. Evaluate it together.
- While negotiating, avoid value judgements. Encourage pupils for decisions regarding selection of activities.

- ❑ Encourage pupils to bring negotiation issues without hesitation.
- ❑ Negotiations must take into account special needs in the classroom.
- ❑ Be open for negotiation, but firm regarding realisation of negotiated goals and implementation of negotiated learning activities.
- ❑ Evaluate the process and outcome of negotiation in terms of anticipated learning outcome.
- ❑ Ask pupils to evaluate considering such questions as:
 - (a) Are you satisfied with the negotiation process? Did it meet your needs?
 - (b) Did negotiation help you in your individual learning? Did it help you tackle your learning difficulties?
 - (c) What did you personally gain from negotiation?
 - (d) Would you like to continue the negotiation process.

Reflect and Do

Do you negotiate objectives and activities with your pupils? Do you do it regularly or incidentally? What is your experience? Is it different from what has been described here? Do you find in these guidelines some ideas to refine your practice? Try, these may be helpful to increase effectiveness of your teaching.

Out of Classroom Learning

Traditionally teaching is conceived as an activity confined within the four walls of the classroom. Out-of-classroom learning activities are not only acceptable these days, but are considered essential to learning for several reasons. It takes students from theoretical learning in the classroom and simulated learning environment to real situations in the environment. Environmental studies as a curriculum area and medium of learning has further necessitated out-of-classroom learning experiences. Secondly, there are some children with low level of intellectual functioning which limit their capacity to generalise and transfer learning to new situations. For them learning in actual situations outside the classroom is a must. Functional skills are taught to them in real life situations. It also breaks isolation of school from the community. The bridge between life in the classroom and the community is built. Lastly, parent-to-child, child-to-parent, child-to-community and community-to-child educational experiences are reinforced.

The out-of-classroom activities, to be effective, are to be planned well to economise time and maximise learning outcomes. Its organisation requires flexibility in curriculum and scheduling in schools. It also requires organisational support from both school and the

community. Involvement of community members is always useful. Follow-up of these activities is as important as planning. Both are cooperative processes involving pupils, colleagues and the community. Follow-up aims at evaluating the process and outcomes, and synthesis and consolidation of the learning outcomes.



Guidelines

The guidelines for organising out-of-classroom learning experiences are:

- ❑ Identify the learning tasks requiring out-of-classroom activities (visit to another room, visit to a zoo or

other places of educational significance, visit for studying physical and social environments, artisans and other members in the community, etc.).

- Select timing of the out-of-classroom activity and plan a slot in the schedule through consultation and negotiation with relevant persons (other teachers, head of the institution, persons responsible for managing the places to be visited, etc.).
- Inform responsible persons and organisations about the purpose of the visit alongwith expectations and assistance needed from them.
- Inform parents and obtain consent, if the visit is in the time beyond school hours or requires resource contribution from pupils.
- Involve pupils and colleagues in planning the out-of-classroom activity. Also involve community members/parents, if possible.
- Encourage pupil initiative and participation in planning the activity through transforming, listing and cooperative decision-making.
- Define roles and responsibilities of pupils for the activity on outside study.
- Take precautions for safe conduct of the activities and further use of time.
- Ensure participation of all pupils at different stages of the activity.
- Provide for mutual discussion on study site and recording of observations for further discussion later on.
- Provide opportunity for sharing experiences in the class after return from the visit. Let the learning outcomes be consolidated through summarising and listing.
- Evaluate the process and outcomes of the learning experiences gained in the out-of-classroom activity considering such questions as:

- (a) Did planning help?
- (b) Did we learn as we expected?
- (c) Are we satisfied with organisational aspects?
- (d) Would you like more of such activities or like to work in the classroom?

Reflect and Do

Do you organise out-of-classroom activities? Do you proceed as described here? Would you like to review and modify your way of doing? Would you like to add your experience to it? Try and enrich your repertoire of skills.

P

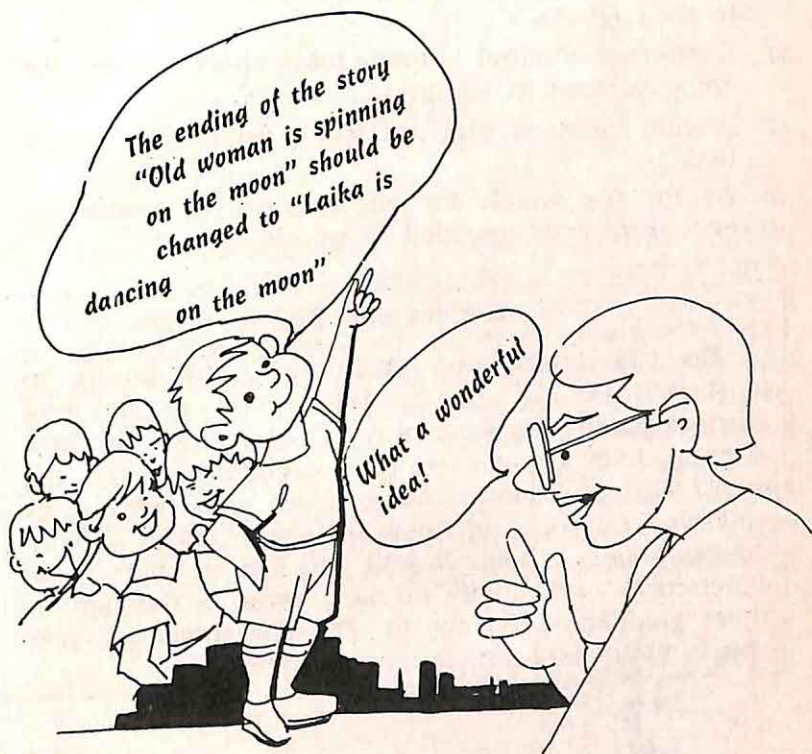
Praising and Encouraging

Each one of us yearns for recognition. If efforts of the learners and their achievements are recognised, they are motivated to put in more efforts to complete the task. It not only motivates learners, but also sustains it throughout. It increases vim and vigour to pursue the task. Praising and encouraging efforts of children and their achievement is, therefore, an appropriate way to celebrate their achievements. It is an effective way of reinforcing pupil behaviour.

Praising and encouraging can be used in several ways in the classroom. It can be used for individual or group achievement. So, it can be directed at individuals and groups. It can be given privately or publicly. For example, smile, nod, pat and even touch on the back, represent nonverbal reinforcers. Saying good, excellent, 'that is very good', 'yes, go on', etc. are examples of verbal reinforcers.

To be effective praise is to be natural, spontaneous and appropriate. It is immediate and not delayed. It is to be rational in the sense that the praising and encouraging words are in some way related to the amount and quality of achievement. There should be some scope for stronger praise for improved performance. Routinised praise loses its effectiveness. The children must know the cause of praise. If the task is difficult and the pupil faces difficulty, even a prompt is perceived as

encouragement to continue the effort. The praise and encouragement, therefore, should be according to the demands of a situation. For this purpose, the teacher should know the child well.



Guidelines

For teaching, guidelines for effective use of praise and encouragement of pupil efforts, the teacher should:

- ❑ Be willing to recognise genuine efforts and achievement of pupils.
- ❑ Select appropriate words or actions for praising or encouraging taking into consideration the quality of efforts and achievement.

- ❑ Performance should be immediately followed by praise and encouragements.
- ❑ Be sensitive to children who feel embarrassed when praised publicly. Give private praise till such a child overcomes shyness.
- ❑ While praising or encouraging pupil, attribute success to their efforts.
- ❑ Encourage children to make more effort because they enjoy success in learning.
- ❑ Prompt children who are stuck up in the learning task.
- ❑ Be on the watch for effectiveness of praise and encouragement provided to pupils.

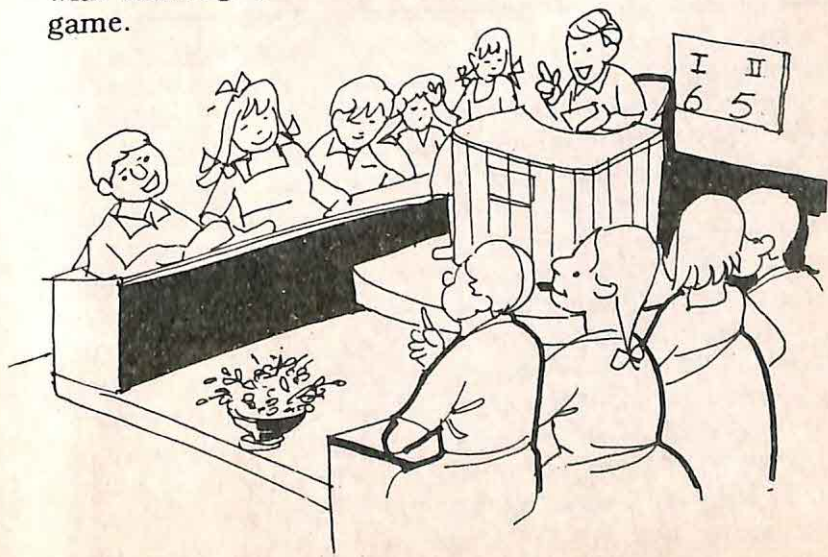
Reflect and Do

Do you praise and encourage your pupils in learning? Do all pupils take your praise and encouragement the same way? Does it draw the best of your child? Do you feel that sometimes it does not work? Do you feel that it does not work with some children? Do you find answers here to some of your doubts about its use? Would you like to review your experiences and modify in some ways in the light of these guidelines? Surely do. The guidelines will help you to make your practice more effective.

Q

Quiz

Quiz is basically a set of questions on some content area. It is one of the quickest ways to monitor progress of learning of pupils in the classroom. Continuous monitoring of progress is an important aspect of effective teaching. Besides monitoring pupil progress, quiz also has motivational effect. Quiz does not have the rigour of a test, but provides a good indicator of the extent of learning a particular task. In formative evaluation it occupies a place of significance. It can take both oral as well as written form. If it is organised as a competition with drawing questions through lot, it also serves as a game.



Guidelines

To develop and organize quiz, effective teacher should:

- ❑ Decide the stage in teaching at which quiz is to be organized to assess learning.
- ❑ Specify the purpose for which quiz is to be organized (motivational, assessment of learning).
- ❑ Decide about the format of the quiz (As question-answer or game with scoring, competition, etc.).
- ❑ Decide the medium of quiz (oral or written).
- ❑ Explain purpose, format, instructions and rules of procedure clearly.
- ❑ Organise the quiz session according to plan.
- ❑ Encourage pupils to self correct and score quiz.
- ❑ Allow pupils to form opinion about their performance.
- ❑ Watch for effectiveness of the quiz.

Reflect and Do

Do you organise quiz? Do you use it for different purposes? Does it motivate pupils? Would you like to use it more often? These guidelines will help you to make it more effective in teaching.

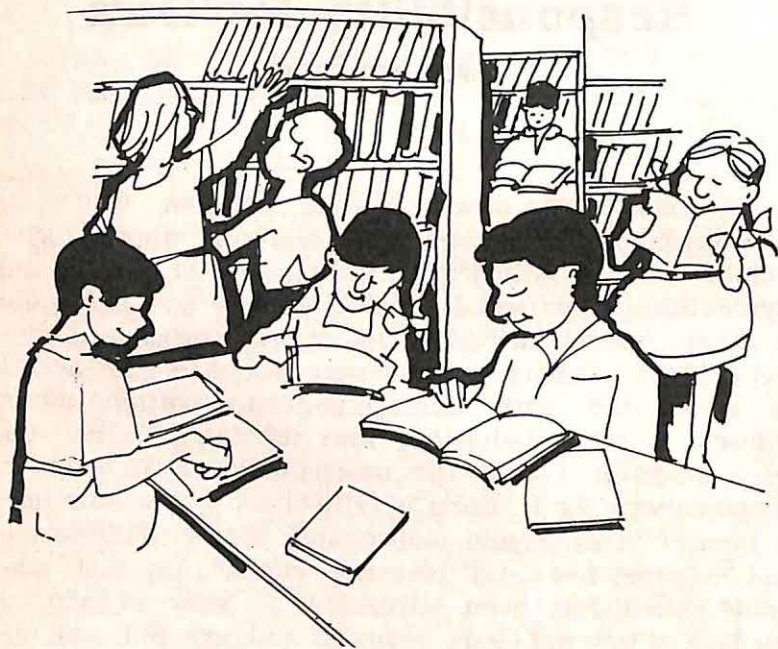


Responsibility for Own Learning

It has been observed that children who take responsibility for their own learning show higher achievement. It is based on the concept of the self and perceptions of personal control. Positive self perception and performance mutually reinforce each other. Academic achievement fosters positive perceptions of the self. It is associated with achievement motivation which influences pupil behaviour and learning. It has also been discovered that the development of a sense of responsibility for learning is critical for pupils who have a history of academic failure and poor perceptions of self, competence and personal control. In fact poor achievement has been attributed, at least in part, to the lack of internal locus of control and poor self estimate.

Responsibility for own learning has particular significance for children with special needs. The obvious reason is that these children are more likely to attribute academic as well as social and personal success and failure to forces outside themselves. In other words, pupils with special needs are more likely to perceive an **external locus of control**. They are more likely to accept responsibility for failure than for success. They generally do not recognise ability or effort as controllable determinants of those pupils with special needs who

assume high level of academic achievement. It is, therefore, necessary to ensure that students take responsibility for their own learning. They should be active learners, negotiators of objectives and learning activities, monitors of progress, and sharing their experiences with others. They should be able to self check and self correct learning task, use learning resources and should not hesitate seeking and giving assistance in learning.



Guidelines

The guidelines for teachers to develop in pupils the responsibility for learning are:

- Have trust in the abilities of pupils to learn and take charge of their learning.
- Encourage pupils to realise that their success is the result of predominantly their own efforts. They should be guided to internal rather than external control.

- Provide success experience to pupils through independent learning to boost their self esteem and self concept.
- Encourage independent learning decisions and taking risks in learning.
- Follow active learning procedures to develop responsibility for own learning.
- Give opportunity for choosing learning experiences.
- Help children with special needs to identify external locus of control for their academic failure along with limitations, if any.
- Enforce accountability alongwith self responsibility for learning.
- Tolerate risk taking and failure in learning.
- Help pupils identify other learning strategies which can lead them to success.
- Watch for use of the responsibility and ensure accountability.

Reflect and Do

Do you have trust in the self learning management of your pupils? Do you translate this trust in your teaching style? Do you encourage your pupils to take responsibility for their learning? Did you give responsibility and withdrew after sometime because it did not work? Try with the guidelines, if so? If you are already practising, review. The guidelines may help you making your practice more effective.

S

Success Experience

Success breeds success is not a rhetoric. It is a reality. Success experience is self rewarding. It increases vim and vigour to carry on the task further and meet challenges. Success depends on not only the level at which the task is set, but also the previous experience of the learners, the time available for completing the task and problem solving capacity of pupils. It is also determined by the confidence and the positive self concept of pupils. On all these things depend the risk taking behaviour in learning which helps individuals in attacking the task of problem solving from different routes. The chances of success increase as the learner proceeds with confidence. All this is possible, if teacher tolerates failure and provides encouragement for trying out alternative strategies.

To minimise failure possibilities and maximise chances of success experience, the learning task can be designed according to the previous experience, and existing knowledge, skills and attitude of pupils. Based on feedback, especially for those children who are facing learning difficulties, the task can be broken down into convenient smaller units. Prompting pupils about to experience failure and providing effective support for learning also increase chances of success experience. Remember expectation to succeed also contributes to success.

It should not be taken to mean that pupils should always be given a simple task to succeed. Too simple task can have demotivating effect. The task should be simple as well as challenging. Complexity may be increased along with success experience. Thus, the pupils learn to succeed in doing tasks of increasing complexity.



Guidelines

To provide success experience to pupils in learning, the teacher should plan their teaching keeping the following points in consideration:

- ❑ Plan for success experience in teaching.
- ❑ Break the learning task into subtasks which are challenging as well as simple.

- ❑ Help pupils to recognise success at different stages of the learning task.
- ❑ Encourage pupils to follow different routes for problem solving.
- ❑ Provide prompt, if the pupil is perceived as reaching frustration level.
- ❑ Provide support to pupils directly or through peers to ensure success.
- ❑ Attribute success to pupil efforts.
- ❑ Provide opportunity for sharing pupils with peers.
- ❑ Use alternative material for learning the task.
- ❑ Celebrate success experience with pupils.

Reflect and Do

Have you observed your pupil behaviour when they experience success in completing the learning task or solving problem? Have you observed them in completing a challenging task requiring lot of efforts and guts? How do they feel? How do you feel when you succeed in meeting the challenge? Did you like to share the success? Did you feel that somebody should pat you for this accomplishment? Did you feel like getting support from someone when faced with frustrating level problem? Shouldn't you provide the thrills of success to your children in the classroom? Why not reflect on the guidelines and make up your mind to provide success experience to your pupils in the classroom? Effecting teaching will be at your doorstep.

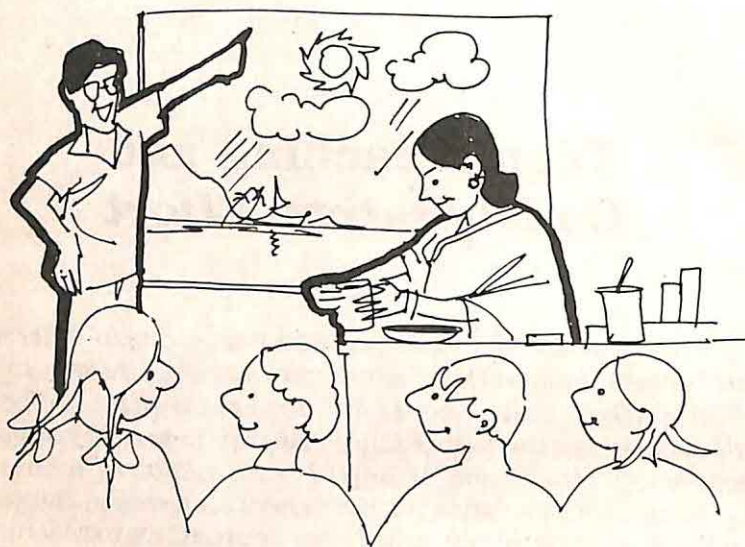
T

Team Teaching and Collaborative Effort

Each teacher has strengths and limitations in different curriculum areas. There are some learning tasks which require more than one adult in the classroom. There are occasions at which teachers require help and support from each other. For example, team effort is required for curriculum planning for the school as a whole. Subject teams may think about innovative approaches to teaching and experimental try out. Visits and other out-of-classroom activities transcend class barrier. Adoption of some innovative approaches to teaching may require team work. These are the reasons for the emergence of the concept of collaborative teaching. It is not only helpful to teachers, but also to all pupils across grades.

Collaborative teaching takes different forms. Two teachers who want to try out an innovation in teaching collaboratively can form a team. For example, they may decide to try scientific inquiry approach in teaching to develop inquiry skills in children. They can plan together for respective lessons or even a common lesson for both classes and reinforce each other's effort through systematic observation and feedback, providing moral support to each other in overcoming the initial discomfort. There can be more than two teachers for a cooperative learning task across the grades. There can be collaborative

team of teachers, parents or other community members. The form of collaboration depends on the nature of the teaching-learning task. The teachers share their experiences not only with members of the collaborative team, but also with other faculty members.



Guidelines

The guidelines for team teaching and collaborative teaching are:

- ❑ Be open to share classroom platform with colleagues and other adults. Don't hesitate in seeking and giving professional help.
- ❑ Identify curriculum areas for team teaching and collaborative teaching.
- ❑ Identify the faculty members and other adults for collaborative teaching.
- ❑ Specify roles and responsibilities for collaborative teaching.
- ❑ Involve the collaborating individuals at all stages right from the planning stage.

- Provide support to each other in teaching and innovative experimentation.
- Evaluate collaborative process and outcomes considering such questions as:
 - (a) Were all collaborative individuals actively involved all through?
 - (b) Did all collaborating individuals contribute to teaching?
 - (c) Did all enjoy teaching?
 - (d) Did pupils enjoy and learn the tasks?
 - (e) What can be done to further improve collaborative process?

Reflect and Do

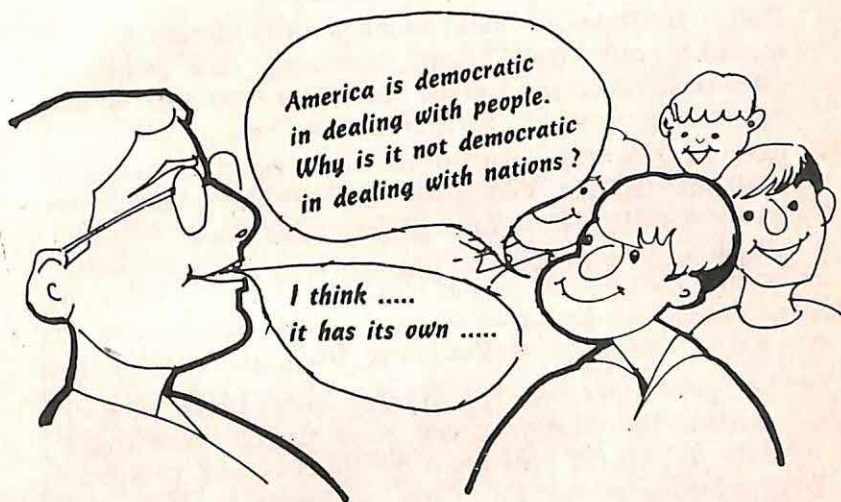
Do you feel like sharing and collaborating in teaching with your colleagues? Do you feel like involving parents or other community members in some of your teaching activities? Do you have opportunity for planning curriculum and teaching together with other colleagues? Do you share your excitement of innovating a teaching procedure or solving learning problem of a child? Do you extend support to teaching by your colleague in the school? Do some of your colleagues help you and learn with you in teaching when you request? If not, what prevents you and your colleagues? Would you like to try? Would you like to undertake atleast one or two collaborative teaching activities with a colleague? See how these guidelines work. Surely, you would like to continue and extend its scope to parents and community members. A good way to mobilise and use scarce human resource for effective teaching!

Unexpected Encounters

Teaching involves human beings. Despite elaborate planning and anticipation of pupil behaviour, the teachers are bound to experience unexpected encounters. The human behaviour is so fluid in the classroom that teachers are required to relook at their strategies spontaneously at a particular moment. They are faced with disruptive behaviour in the classroom. Unanticipated individual need is expressed by a particular pupil. The negotiation has reached a dead end making reconciliation of competing demands difficult. The organisational strategy has not worked for a particular activity. Apparatus or equipment has not worked at the moment. A gifted child has thrown a challenge that the teacher is not sure of himself how to respond spontaneously. The teacher aid or other adults have not behaved the way it was planned. There is sudden interference from outside. Unexpected encounter may take any form. The possibility cannot be ruled out.

The teacher must be prepared for unexpected encounters in the classroom. Effective response of teachers come out spontaneously from the professional problem solving skills developed over a period of time. Teacher alertness, classroom management skills, teaching management competencies, and human relations competencies are integrated to formulate spontaneous responses. Openness, self concept and confidence, the

will to succeed, and enthusiasm also contribute to effectively respond to unexpected encounters. Another way is to plan different routes to learning. For effective response knowledge about pupils is essential. Classroom trust takes away the heat out of the unexpected encounters. These should be viewed as challenge and opportunity rather than threats. The success in dealing with such encounters is yours.



Guidelines

Guidelines for dealing with unexpected encounters in the classroom effectively are:

- ☐ Always expect unexpected encounters and be prepared to effectively meet them.
- ☐ Unexpected encounter may sometimes be unique, the one that has not been encountered before.
- ☐ View unexpected encounters in the classroom as challenge and opportunity for professional competence refinement and not as a threat.
- ☐ React naturally to unexpected encounters without feeling excited and worked up even if you know that

it has been engineered by individuals or groups in the classroom.

- Ignore trifle unexpected encounters, but deal with them, if any one persists.
- Be firm and do not hesitate direct telling or intervention like moving near, if the encounter is likely to disrupt teaching-learning in the classroom.
- If you want some more time to think in the classroom, refer it to the class how to respond to this situation. Meanwhile formulate your response.
- Don't hesitate to acknowledge any limitation or mistake committed during teaching. Ask pupils to refer and reflect and come back the next day or any convenient time for further interaction.
- Keep a learning journal of unexpected encounters and how did you deal with it. It prepares you better for next time. Some may get repeated also.
- Never make unexpected encounter an issue.

Reflect and Do

Did you experience unexpected encounters in your classroom? How did you feel about them? Were these created or natural outcomes of the teaching process? Were you prepared for such encounters? How did you respond? Did it work? What did you learn from each of such encounters? Was your experience a help in subsequent encounters? Review your experience with the guidelines. How would you like to be better prepared for such encounters in future? The guidelines will be of help to you. Do keep a record and share with others. A step forward to effective teaching!

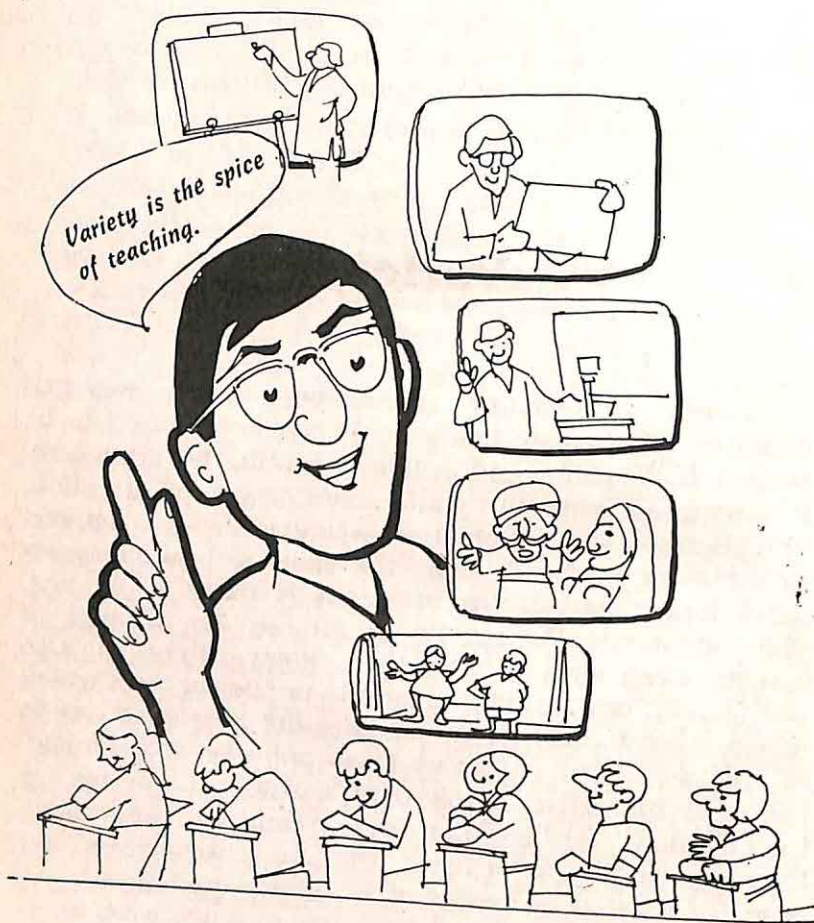


Variety

Variety of learning experiences is an essential condition of effective teaching. It has been found to be related to learning and achievement in the classroom. It is required for securing and sustaining pupil attention. The attention span of children is limited. If same activity, in the same medium, using the same senses continues for a longer period, the attention is likely to be lost. The monotony also results in fatigue. The change of activity overcomes fatigue to a great extent. It also provides an opportunity for pupils to choose from which meets their individual needs. Meeting individual needs in the classroom enhances class achievement. Finally, the more the senses involved in learning, the better are the chances for learning and retention. Alternative learning routes to achieve the same objectives are provided through a variety of learning experiences.

The variety is required in terms of both, what is to be done and how it is to be done. Effective teachers plan their day in variety of learning contexts within which to work. It helps them in becoming better learners having inner locus of control, capable of finding the information they need, being sensitive to their preferred ways of learning, and becoming confident to problems they have not previously encountered. It leads them to take responsibility for their own learning making them independent learners, the ultimate goal of teaching. When

they make choice, naturally they develop the skills of reflective thinking and making decisions.



In terms of variation in teacher behaviours, gestures, movement, pause and oral-visual-switching are involved. These make the teacher lively and provide variety in teaching. These also help in attention management in the classroom.

Guidelines

The guidelines for providing variety in teaching are:

- Plan for variety in teaching through:
 - (a) Variety of content;
 - (b) Variety in objectives including levels of objectives;
 - (c) Variety in learning experiences (individual, pairs, small group, large group);
 - (d) Variety of instructional material (print and non-print);
 - (e) Variety of context (inside and outside classroom).
- Provide opportunity for problem solving.
- Induct variety in your own teaching behaviours.
- Variety should be meaningful and not just for the sake of variety.
- Encourage pupils to choose from a variety of learning experiences to match with their learning preferences.
- Continuously review effectiveness of variety, particularly for meeting individual needs.

Reflect and Do

Do you find your pupils fatigued often in the classroom? Are they inattentive? What do you do? Has it worked? Do you provide variety in teaching? How and in what form do you provide variety? Do you like to try some more based on the guidelines given here? Try and observe effect on pupil inattentive and fatigue behaviours. Also observe disruptive behaviours. Do these come down after introducing variety? If so, you are on way to effective teaching.

W

Working Atmosphere

Working atmosphere in the classroom is another condition of effective teaching. Working atmosphere comprises two components, the classroom climate and lay out of the classroom alongwith learning resources. Positive working atmosphere keeps pupils busy and stimulate them to work hard. As an essential aspect of effective teaching, its components have been covered in several other areas. It has, however, been separately considered because of its overriding importance in teaching.

The socio-emotional atmosphere in the classroom is built through human interaction based on classroom trust. The pupils should feel that equal opportunity is available to them without discrimination. The teacher is sensitive to individual needs of all. They are allowed to express needs, make choices, take risks and provide support in their learning efforts. Their efforts should be praised and encouraged, and achievements celebrated. Their initiative should be valued. Pupil sharing of ideas and resources should be encouraged. It all contributes to conducive working atmosphere in the classroom.

Classroom arrangements should be conducive to a variety of activities. The furniture should be functional and comfortable. Movable bulletin boards which can be used as partitions for group work can be helpful. Learning material including aids and appliances often needed in

the classroom should not only be available, but accessible to pupils. It saves teacher's time from routine allotments for more creative work. Display arrangements for products provide recognition to pupil's work. Availability of functional material and equipment also contributes to conducive working atmosphere.



Guidelines

Guidelines for providing conducive working atmosphere in the classroom are:

- ❑ Build classroom trust behaviour.
- ❑ Display business like behaviours in the classroom. Learning is the business in which teachers and pupils have to concentrate together.
- ❑ Allow constructive activity to continue unhampered.
- ❑ Encourage pupils to make choices and take risks.

- ❑ Avoid giving an impression of patronising pupils to meet individual needs.
- ❑ Keep disciplinary intervention to the minimum. Wherever possible, ignore minor infringements of rules and procedures.
- ❑ Give non verbal signals to children who might be getting off task.
- ❑ Be clear about instructions for different activities and changeover.
- ❑ Convey the signal that pupils can take responsibility for own learning.
- ❑ Keep pupils involved holding them accountable for their work.
- ❑ Provide pupils access to learning resources in the classroom.
- ❑ Arrange the classroom for the day's activity ensuring availability of the material at hand.
- ❑ Demand functional furniture and equipment for the classroom for variety of arrangements.
- ❑ Watch for effectiveness of the working atmosphere in the classroom.

Reflect and Do

Think about working atmosphere in your classroom? Do you have trust in all pupils and their abilities? Do all pupils have trust in you? Do they feel that you patronise some pupils? Do pupils have trust in each other? Do they help and cooperate with each other? Are pupils eager to complete the learning task? Do some pupils exhibit disruptive behaviours? How do you manage them? Do you provide access to pupils to materials to be used in teaching? Do you feel that working atmosphere in your classroom needs change? Would you like to use the guidelines to plan and bring about this change? Welcome to another step in making teaching effective.

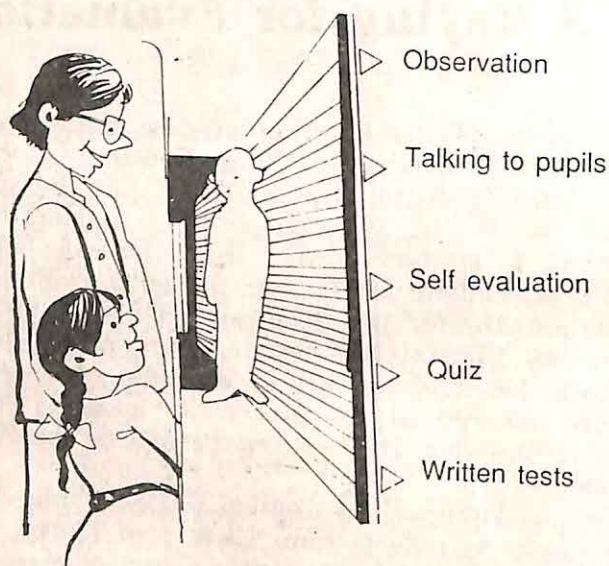
X

X-Raying for Evaluation

X-raying of the learning process and outcomes is essential for effective teaching. Continuous evaluation helps both teachers and pupils. It can be viewed as evaluation of the context, process and outcomes of teaching. It is more formal than the quiz which has been described earlier. In both formative and summative evaluation, the teacher does not act merely as an x-ray technician. The teacher designs evaluation applying the scientific basis of the art of teaching. The pupils are actively involved in the process of evolving evaluation policy and design. They also participate in the evaluation process.

For continuous evaluation, the pupils can be encouraged to reflect upon their own learning at the end of the learning task, and at appropriate stages of the learning, if the task is longer. Points for consideration can be provided by the teacher. In pairs, the pupils can be provided active listening opportunity and sharing. To listen effectively, look at the person who is talking, sit quietly, respond naturally with gestures and expressions, make no comments, and ask questions only if there is need to clarify a point. Another way is provide an opportunity to make statement to pupils sitting in a circle one by one. It provides a chance to everyone to say something. Group feedback can also be obtained by the teacher. These techniques are very useful to evaluate the process of teaching.

Assessment and recording of progress of the learners is also a component of evaluation. It is a little formal than what has been described above. The assessment process can be broken down into three components, namely, information gathering, review and action. The information gathering can be through teacher observations. Other means of collecting information are discussion, written notes, schedules, checklists, tests and audiovisual recording.



Tests are of two types. Norm referenced tests are standardised over a population and provide comparison with other pupils. Criterion referenced tests are those which provide indicators of individual progress on defined criterion of learning. These are more important for monitoring progress of learning and feedback for the improvement of learning. Curriculum based assessment is the emerging evaluation concept using criterion referenced tests. The teacher uses norm referenced test for comparing achievement among pupils and criterion referenced tests when wants to assess pupil performance on a set standard defined in the learning task. It is not that one is good or bad, but teacher should know the

purpose for which these are used.

There should be collaborative review of pupil assessment. It should involve both teachers and pupils. Even pupils should reflect and share so that classroom trust is strengthened. The review should lead to action for improvement of learning. These can be recorded in the learning journal.

Guidelines

The guidelines for continuous x-raying and evaluation of learning and teaching are:

- Evolve evaluation policy with active involvement of pupils.
- Prepare design of day-to-day and terminal evaluation that requires reasonable time to carry out and simple to use.
- Select appropriate tools for collection of information about learning.
- Use criterion referenced tests for curriculum based assessment.
- Carry out collaborative review of progress and plan action for improvement of learning and performance.
- Record progress of individual pupils continuously at regular intervals.
- Involve pupils in evaluation, self check, scoring and recording of progress.
- Share evaluation with pupils and even with parents.
- Use evaluation for improvement of learning and teaching.
- Review evaluation policy and procedure.

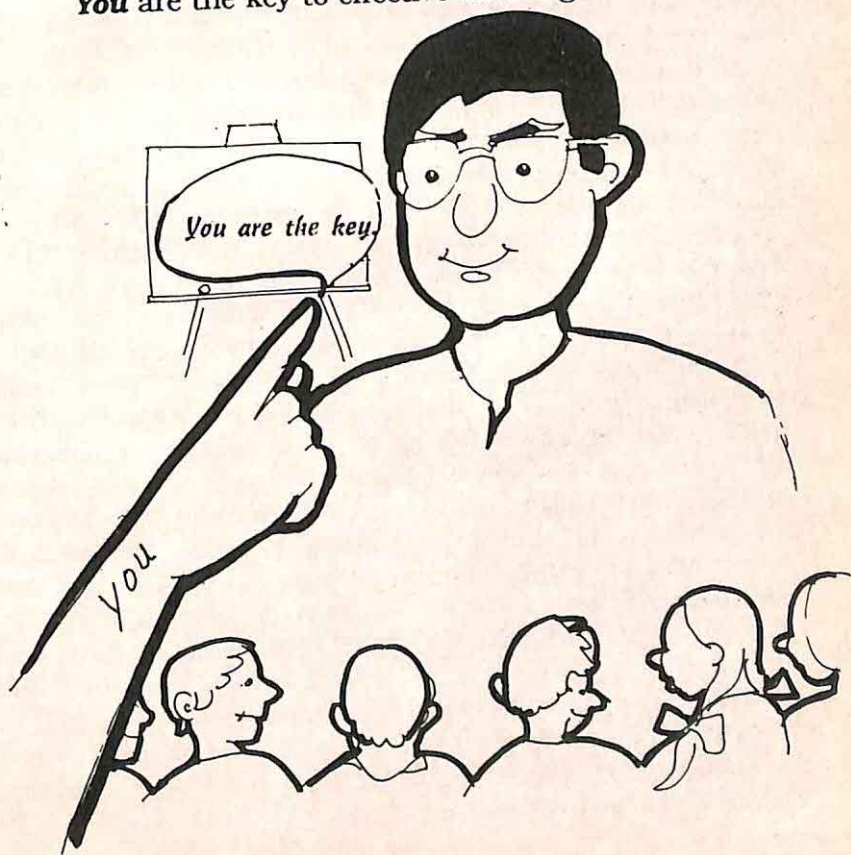
Reflect and Do

Do you have evaluation policy for your class or school? Do you carry out day to day evaluation? If not, do you feel that you should carry out day to day evaluation? What are the difficulties in carrying it out? Is it time consuming? Do you involve pupils in scoring and recording? Is it a help in overcoming time constraint to some extent? What are other constraints? Would you like to plan and carry out now? Use guidelines as a help and move towards effective teaching.

y

You

You are the key to effective teaching in the classroom.



You are the one person who can make a difference in teaching. You can motivate pupils, make them active, involve them in planning and teaching, and challenge and encourage them to excellence. You can make the classroom an achieving enterprise where each child realises his or her potential. You can mobilise and generate resources and ideas. You can act as a reflective teacher using pedagogical intelligence developed over a period of time to ensure independent learning. Be confident of yourself and act decisively. Expect success and success will be yours and your pupils. You and your actions will become the embodiment of effective teaching.

Z

Zeal

Effective teachers have zeal for teaching. They are enthusiastic about teaching and pass on their enthusiasm to pupils to learn. They are enthusiastic about the subject they teach and enthusiastic about the success of their pupils. The enthusiasm and zeal arise out of their passion for teaching, human beings and getting the things done. They have confidence and faith in the goodness of people around. This confidence and faith in the goodness of human beings get transferred to teaching and pupils.

The zeal and enthusiasm of effective teachers are reflected in all activities they carry out, the way they enter the classroom, the way they talk, the way they move around, the way they explain, the way they deal with individual pupils, and the way they encourage children to put in their best efforts in learning. They exude energy and dynamism. They are not awed by unexpected encounters in the classroom. Their professional problem solving behaviour is spontaneous and natural. Their sharing of strength and limitations with pupils and eagerness to learning together enthuse pupils to be open and work with mutual trust in the classroom.

The enthusiastic teachers are confident of their ability to do more than one thing at the same time. For example, they can deal with an individual while keeping an eye on the class. They do not like to disturb the free flow of

learning activities for trifles. They maintain the pace and tempo of teaching.

The effective teachers make their zeal and enthusiasm visible in the classroom. It is not only an internal passion, but also an expression through verbal and non verbal behaviours. Visibility is infectious. It catches each pupil and the whole class is brimmed with the enthusiasm to learn, share and achieve. It becomes an achieving classroom. Each celebrates achievement. An essential input to effective teaching and classroom achievement!



Guidelines

The guidelines for making zeal and enthusiasm visible in the classroom for effective teaching are:

- Be prepared for teaching. Do not enter the classroom with reservation, even for substitute teaching.

Arguments about scheduling should be left to the head's chamber or staff room. Don't carry the burden of arguments to the classroom.

- ❑ Do not bring personal problem ridden face to the classroom.
- ❑ Enter the classroom with a smile and expression of welcome to the pupils.
- ❑ Convey the expression of alertness, sensitivity to pupil needs, and the optimism to succeed.
- ❑ Tone up pupils for committing best efforts and the desire to succeed in learning. Don't leave out any child. Involve each and enthuse each.
- ❑ Use meaningful movements and gestures in the classroom.
- ❑ Celebrate success and achievement of pupils.
- ❑ Make judicious use of humour occasionally.
- ❑ Be confident of succeeding and keep on enthusiasm in pupils continuously.

Reflect and Do

Do you enter the classroom always full of enthusiasm for teaching? Do you sometimes feel a little run down? Do you sometimes go to the class with the weight of some responsibility thrust on you unwillingly? Do you carry the burden of arguments sometimes? Have you noticed the difference in your teaching when you enter with enthusiasm and when you enter just for a routine formality or duty? How do your pupils feel on two occasions? Does your state get reflected in theirs? Do they work more in the first case or the second? What can you do to sustain your zeal and enthusiasm? Do you want to? Can these guidelines be of use to you? Of course, they can. Why not emerge with success and effective teaching experience then?

Epilogue

Teaching is a humane activity. It involves human beings who are not mere robots which can be programmed to act only in predecided ways. Despite well informed anticipation and precise planning for teaching, it has to be responsive to unpredictable response of pupils in the classroom. They have life, feelings and emotions besides cognition which takes them beyond robotics. Teaching, therefore, is to be dynamic and lively responding to individual needs in the classroom alongwith meeting collective needs. It has also to be responsive to emotions and feelings alongwith cognitive learning. It uses the existing skills and develops new ones in pupils.

Teaching can be dynamic and lively. It can also be dull and insipid. It can be ineffective resulting in learning and achievement. The experience shows that there can be teaching without learning. Otherwise, how can we explain pupils unable to read, write and operate on numbers even after years of schooling. There is no dearth of classrooms where the whole effort is directed at the coverage of syllabus and textbooks pushing the child in actual learning to back stage.

Teachers and education officers can be heard asserting proudly that the syllabus has been covered and even revised. They teach the subject not the child. They meet the needs of the department and not the child. They do not teach the child but syllabus and textbooks. When

asked if all pupils have learnt the covered syllabus, teachers feel shaky and unsure. If probed further whether children enjoyed learning in the classroom, the teacher willingness to respond further regresses.

Teaching without pupil learning to their potential is the paradox haunting the educational system. It is more so in developing countries which are in the process of achieving the goal of education for all, have to expand the educational system fast or are just emerging from the unprecedented expansion drive. The reasons for this state of teaching are mostly attributed by educators to factors external to the school and classroom. For example, pupil history, home environment, parental apathy and failure of administration to provide resources and facilities are the spontaneous responses. Rarely do teachers attribute ineffectiveness of teaching to factors within the classroom and the school, much less to those pertaining to actual teaching. Constraints are perceived as unsurmountables defence mechanism and rationalisation of conventional teaching. In fact teaching is what teacher makes it. It will do to children what teacher would intend and make it to do.

The presentation in the preceding chapters carry one alphabet each representing one aspect or a step in teaching. It aims at stimulating teachers to think and reflect on their notions about teaching, the principles and practices they follow, and the impact these make on pupil learning. The single most important contribution of the presentation is to bring the child and learning to the centre stage.

The premise that children cannot learn without teaching has been challenged. The shift in emphasis from teaching to learning is clearly visible. The emerging concept of learning oriented and learner centred approach has been the guiding force throughout the book. It makes learning a pleasant and fruitful experience instead of painful experience in conventional classroom teaching. Both pupils and teachers are active partners in learning. The roles of both overlap and interact in this participatory teaching approach.

A to Z format for presenting principles and practice of teaching irrespective of their logical sequence need to be reflected upon now. How do you feel about this mode of presentation? Close your eyes for a moment. Try to recall the principles and practices represented by each alphabet. Could you recall? Have you missed any? I believe not. You can recall these, if not in first attempt, you can in the second. If it is so, the chosen mode of presentation is a success and its objective seems to have been achieved.

At the end of each day you can reflect on your teaching. Spare about fifteen minutes from your engagements. As you recall each alphabet and the respective principle or practice of teaching, reflect whether you used it in teaching that day. Was it needed? Did you use it? Was it needed, but did you miss it? Do you feel that you should have used it?

Also reflect on why could you not use it? Is it because you did not feel confident to use it? Would you like to use it next time? What will you do to use it next time to gain confidence? Could you not use it because you could not follow the guidelines completely? Could you not place them in the context of your teaching? Could you have done it with a little advance thinking to adapt it to your class context? Would you like to do it now? Would you like to adopt and add guidelines to suit your class?

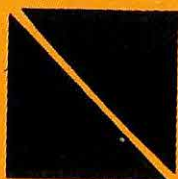
Did the organisational arrangement in the school restrain you from using a particular principle or practice in your teaching? Did you discuss with your colleagues? Did you discuss with the head of the institution? Did they promise to support you? Would you like to use it now? If they did not support you, would you give up or make further effort? Would you continue your persuasive efforts till they promise to support? Would you try again? Would you find an alternative way if support is not forthcoming? Are you confident that you can use next time, if you need it? I am sure about that as I am sure about your success, if you do.

Reflect further on how did your pupils feel when you used these principles and practices? Did they feel more relaxed in learning? Did they feel more interested in learning? Did they enjoy learning? Did they attend your classes more regularly? Do they now learn more? Did mutual trust in the classroom improve? Do they seek from and give help to each other willingly? Do they express their needs in the classroom unhesitatingly? Do they approach you for help or discussion without hesitation? Are they prepared to take risk in learning and problem solving? If so, it will reinforce your determination to incorporate these principles and practices in your teaching style. If you are already using some, it will provide you the basis to continue.



Acknowledge or not, express or not, each teacher does reflect on what she or he reads and do. You grow if you share these reflections. You also help others grow and you should feel proud about your contribution to the enrichment of teaching. Think for a while. Do these twenty six principles and practices cover teaching comprehensively? Does your experience reveal that some aspects still remain uncovered? Do you feel that these should be incorporated in the lively and effective teaching concept? Don't keep it to yourself. Share it with others and the author particularly. You can talk about it. You can also write about it in any educational journal. Several are published by the National Council of Educational Research and Training. Don't hesitate. You are as good a thinker, a teacher, an author as anybody in the profession of teaching. Write in any language you like, but do make an attempt.

The principles and practice of effective teaching presented here are based on the state of the art research and experience. The objectives and context of teaching change with societal progress. Media and instruments of learning continuously undergo change as science and technology progresses. New insights emerge from evolving psychology of learning. The search for effective teaching, therefore, is an on-going process. You are an active participant in this search. Experiment, innovate, reflect and share your experience to enrich the scientific basis of the art of teaching. Not an impossible, but a realistic expectation! I am optimistic about the contribution from each teacher to this effort. Cooperative and collaborative search for effective teaching continues till teaching is the need of societies. This is the hope with which the book is concluded.



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